Printing Equipment Engineer

JULY, 1942

WAR CONDITIONS

The conditions of recent months, climaxed by war, have affected Harris operations as they have countless other companies. The change in manufacturing capacity from regular pursuits to war demands, plus shortages of materials, makes it impossible to build Harris presses for sale to the graphic arts industry.

However, every effort will be made to maintain the high standard of service to which Harris users have been accustomed for so many years.

To keep pace with future needs and to promote the continued development of offset, effort will be made to carry forward Harris research, engineering and development activities to the end that progress will have been made when the manufacture of presses for the industry is resumed. The research programs of the Harris Laboratories on the chemistry of lithography will also be continued and products of the Laboratories will be for sale.

Harris merchandising efforts during this period will be devoted to increasing the effective production and use of the printed message.

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Men and Management Join Hands

. . . . — to Multiply the "V"

Men and Management, at Wood Newspaper Machinery Corporation, long since joined hands in a *double "V"*— that is spelling out *"Win"* in the vital Battle of Production. This sort of industrial cooperation hastens the day when Wood can release that same energy into building finer equipment — to produce better-printed newspapers — that more people will *like to read.* Meanwhile, Wood *maintenance* service is available to meet your immediate, pressing needs, with rebuilt machines, repair parts, engineering consultation.

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PLAINFIELD, NEW JERSEY **New York Office: 501 Fifth Avenue**

New Target for Industry:

More Dollars Per Man Per Month in the PAY-ROLL WAR SAVINGS PLAN

TO WIN THIS WAR, more and more billions are needed and needed fast—AT LEAST A BILLION DOLLARS A MONTH IN WAR BOND SALES ALONE!

This means a *minimum* of 10 percent of the gross pay roll invested in War Bonds in every plant, office, firm, and factory in the land.

Best and quickest way to raise this money—and at the same time to "brake" inflation—is by stepping up the Pay-Roll War Savings Plan, having every company offer every worker the chance to buy MORE BONDS.

Truly, in this War of Survival, VICTORY BEGINS AT THE PAY WINDOW.

If your firm has already installed the Pay-Roll War Savings Plan, *now is the time—*

1. To secure wider employee participation.
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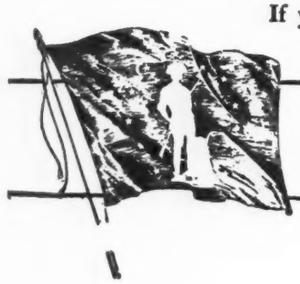


U. S. War Savings Bonds

This space is a contribution to America's all-out war program by

PRINTING EQUIPMENT ENGINEER

16—28448-1 U. S. GOVERNMENT PRINTING OFFICE

It is unusual . . . but very practical

FOR plants with idle printing machinery, obsolete or near-obsolete, this Plan is unique — the subject of much favorable comment . . . and much favorable action.

It affords an incentive to the owner of such old printing machinery to scrap it now.

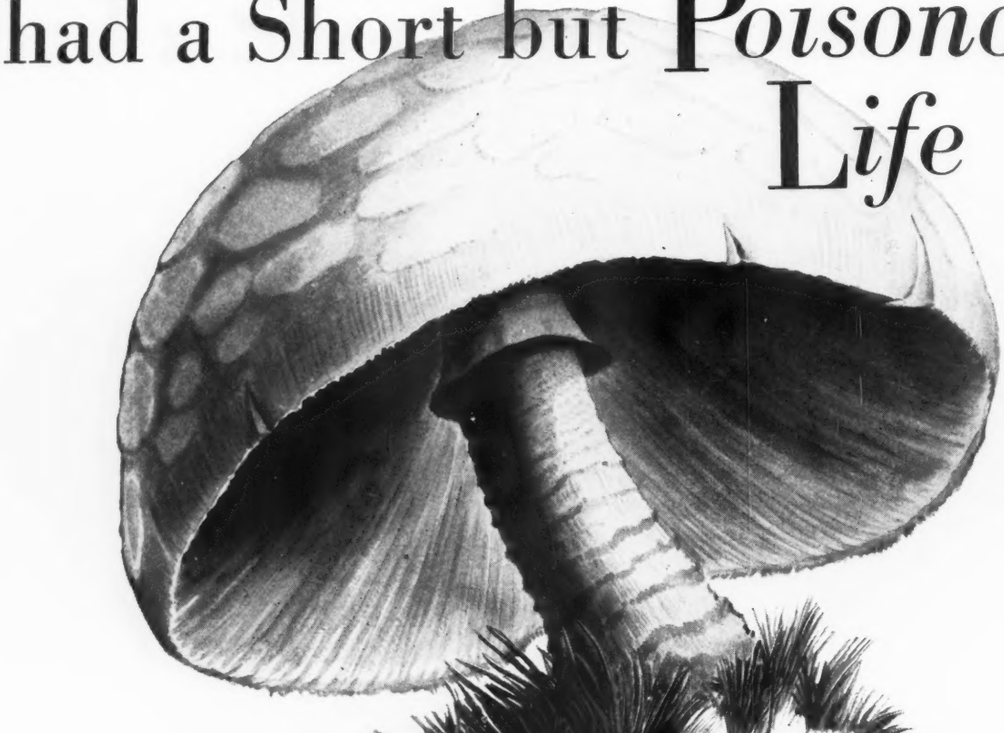
The Plan, introduced long before the present national drive to salvage scrap materials, has already demonstrated its effectiveness in securing hundreds upon hundreds of tons of desperately needed scrap — much of which has doubtlessly already been converted into guns, tanks, munitions, ships and the machinery with which to make them.

In addition, the Plan has already set up substantial reserves against post-war pressroom rehabilitation for the scores of participating printers from coast to coast, while at the same time providing them in cash with the much greater than usual sums now available for such ferrous metal scrap.

To every printer, large and small, we suggest the patriotic necessity of sending at once to his scrap distributor every ounce of scrap rubber, zinc, copper, brass, nickel, chromium, or other scarce materials. For every printer having heavy obsolete machinery we suggest its immediate scrapping under the Miller War-Time Scrap Allowance Plan. To take advantage of this Plan a written agreement must be made *before* the equipment is junked. Full particulars gladly upon request.

Miller Printing Machinery Co., Pittsburgh, Pa.

The *Paper Shortage Myth* had a Short but *Poisonous Life*



It popped up overnight . . . this fable about the scarcity of printing paper. But before it withered under the hot sun of facts, it had poisoned business by fooling some folks into thinking they might be unpatriotic if they advertised. Get this straight! For over a year now, total printing paper production always has exceeded consumption, although panic buying did push up orders. There is ample paper today, over and above what Government and war industries require. Printed advertising continues to be productive, flexible and economical. Maintain present sales and protect your future markets by advertising on Champion paper.

THE CHAMPION PAPER AND FIBRE CO., Hamilton, Ohio

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- **HANDBOOK FOR PRESSMEN — By Fred W. Hoch.** Book written by authority on all phases of flat-bed letterpress production for the practical pressman. Contains 248 pages, 26 illustrations and 24 charts, $3 per copy, cash with order.

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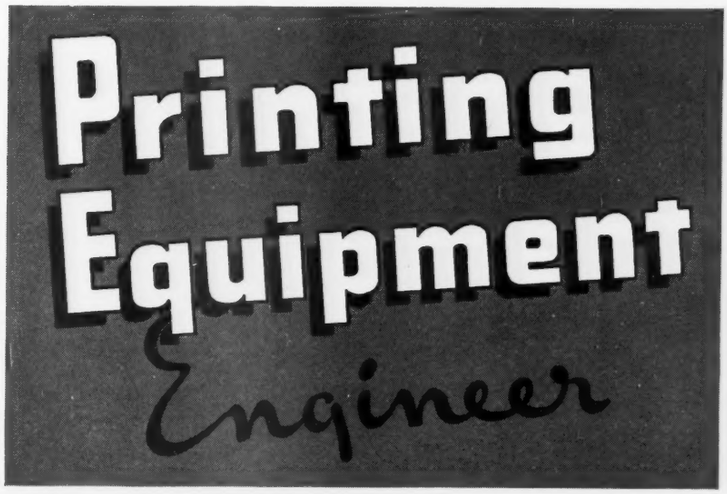
1276 W. Third Street
Cleveland, Ohio

A Technical Publication for the Mechanical Executive Responsible for Printing Production, Equipment and Supplies in the Commercial, Magazine, Private Plant and Daily Newspaper Field.



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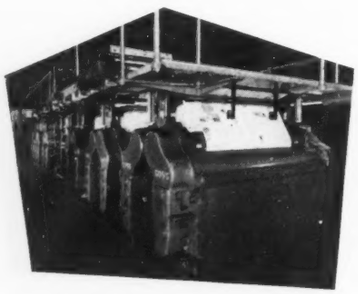
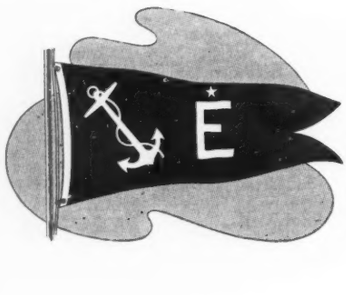
MEMBER CONTROLLED CCA CIRCULATION AUDIT

IN EVERYTHING GOSS DOES



In building the Goss High Speed Anti-Friction Press, many measurements were taken to 1/10,000 of an inch. The very finest of gauges, machines, and testing devices were employed to insure accuracy and help make possible the perfect balance, terrific speed, and freedom from vibration that have been attained with this press. As a result, Goss users can economize on power and upkeep—conserve lubricants, paper and ink—and run less risk of mechanical breakdowns.



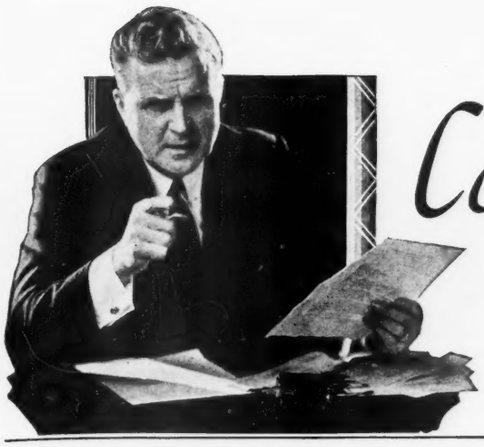
Although the manufacture of Goss presses has been discontinued for the duration, Goss precision carries on and now is manifest in the ordnance produced for the U. S. Navy. The excellence of this work is attested by the All-Navy 'E' burgee that flies at the Goss plant and the "E" badges worn by every Goss employee.

Precision is a Goss tradition. It will be there to the most minute degree in everything Goss builds—in every piece of naval ordnance for winning the war—in every new press for printing newspapers and magazines when the war is won!

THE GOSS PRINTING PRESS CO., 1535 S. PAULINA ST., CHICAGO

GOSS

NEW YORK: 220 E. FORTY-SECOND ST.
SAN FRANCISCO: 74 NEW MONTGOMERY STREET
LONDON, ENGLAND: GOSS PRINTING PRESS CO., Ltd.



Conservation CAN HELP Win the War!

The situation in which our country now stands imposes on all business and industry *an obligation to make the most of its resources* in men, machines and materials. This responsibility rests on the Printing Industry just as heavily as on those industries which have a more active part in producing the implements of war.

It calls for the most intelligent use of manpower and the highest rate of production the printing industry has ever known.

It calls for the utmost efficiency in the operation of all mechanical means of production and meticulous care in their maintenance.

It calls for a reduction of waste to the absolute minimum, and the employment of means and methods which will make it possible to secure the best results from every pound of paper, ink, type and other materials we use.

We can, each of us, record our interest in our country's welfare by applying our own individual effort to these ends.

Can we do less than this when our sons, our brothers, and our neighbor's sons and brothers, are giving their lives to preserve our nation? We may not be able to serve with them in "the line," but we can support them and their efforts by making our own industry—the Printing Industry—the most efficiently operated industry in this great land of ours.

Let us dedicate ourselves and our daily work to the most effective use of our industry's resources.

Suggesting a Practical Plan

To give practical expression to the desire to put into operation a program of conservation in all plants which make up the Printing Industry, we suggest the following procedure:

1st—Appoint a Plant Conservation Committee composed of the responsible executives in each operating department, the General Superintendent to be the Committee Chairman.

2nd—Appoint a Sub-Committee from each operating department, of which the responsible executive of that department shall be chairman.

3rd—Use these Sub-Committees to make a survey of the entire plant, department by department, and on the findings put into operation such a plan as will secure the best results from personnel and machines, and reduce waste of materials to the absolute minimum.

4th—Scrap all obsolete and inefficient machines of every kind.

5th—Search the plant to the very last and most obscure corner for scrap metals, paper and other used materials.

If these things are done conscientiously and completely the Printing Industry will become the most efficiently operated industry in the nation, and will help to win the war.

LANSTON MONOTYPE MACHINE COMPANY

MONOTYPE BUILDING, TWENTY-FOURTH AT LOCUST STREET, PHILADELPHIA, PENNSYLVANIA

Composed in Monotype 20th Century Family and Monotype Artscript, No. 225. Victory Symbol No. 72-4455X

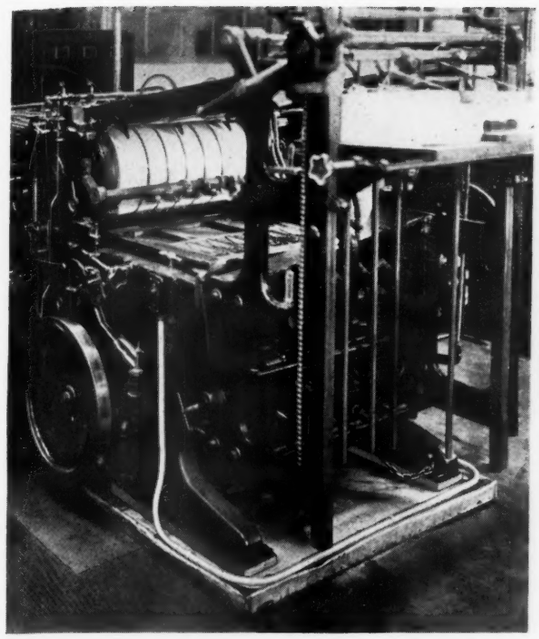
HOE VICTORY RALLY!

COLONEL J. K. CLEMENT,
Deputy Chief of the New York Ordnance District, addressing the recent Hoe Victory Rally dedicated to the employees who produced the work.

"We are here to celebrate the completion of a most important order for munitions of war, an order which, in spite of delays in the early days on account of difficulties in procuring raw materials, has been turned out four months ahead of schedule . . . an achievement that reflects the greatest credit on all ranks of your organization . . . an achievement of which all of you should be proud."

Some of the 1500 employees of R. Hoe & Co., Inc. in whose honor the Victory Rally was held.

R. HOE & CO. INC., 910 EAST 138 STREET, NEW YORK, N. Y.
BOSTON • SAN FRANCISCO • CHICAGO • BIRMINGHAM



Between the base of this Miller Simplex Press and the floor have been placed wool felt pads. The pads reduce transmitted vibrations and appreciably quiet operation of the press.

Felt is utilized for isolating vibration of certain machines used in Graphic Arts

By COMMITTEE ON INFORMATION*

*The Felt Association, New York, N. Y.

USERS of printing equipment and supplies are feeling more and more the effect of shortages, because of WPB regulations with respect to critical or scarce materials as the war progresses. The use of alternates and substitutes of various kinds for varying purposes already has become necessary in equipment using rubber, cork and other substances. Among the alternates which have been investigated for hitherto little known duty is wool felt. The felt is being used to isolate vibration in printing machinery.

The many applications for which felt is used are well known in the printing, engraving and stereotype branches of the trade. Whatever new specifications are desirable or available in the present markets, the felt industry is holding itself ready to meet current demands.

Felt is one of those traditional materials which have been handed down from past generations and more recently adapted to many modern uses. Often classed erroneously with textiles, its most highly developed uses are those in which it serves as an engineering material performing definite functions in the construction and operation of mechanical equipment.

In the matter of vibration, wool felt is being employed as a footing under certain machines used in the Graphic Arts Industries. It is meeting with success in deadening vibration in large and small printing presses, punching and stitching machines, and other equipment. This adds a secondary benefit to the principal advantage which arises from cushioning vibrating mechanism. Where machinery must be rearranged to secure better labor conditions and a more direct movement of work in process, the use of felt isolators introduces economy, for in numerous instances it permits equipment to be located in a new position without drilling or patching floors.

When supported in resilient footings certain machines do not tend to "walk away" from the job, and hence require no permanent hold down fastening. Where positive anchorage is necessary, the use of selected adhesives, which have been developed by felt manufacturers is the only holding means required. A special solvent readily loosens the bond between the machine and the floor when removal is necessary, and it again may be secured by an application of fresh cement.

How Felt is Used

In some instances, the felt pad footing is attached to the legs or base of the machine only, and not to the floor at all. In many, if not most jobs, pads cut from the proper grade and thickness of felt to fit the legs or base, plus a can of recommended cement to hold them in place, are all that are required to make what may be commonly thought of as permanent machinery readily movable.

This gives flexibility from the standpoint of the composing room and bindery. Flatbed presses and folders are readily leveled on uneven floors when felt footings are used. Special foundations used to minimize wear and tear and quiet the throb of high-speed vertical presses can be made effective when felt is used in the special foundations, whether above the floor level or even with it.

For quieting noises common to printing plants, felt mounting can be of great assistance. Vibrations imparted to floors and walls by rigidly mounted machines are transmitted into noise by the resonance of the building itself and its equipment. Vibrations transmitted from room

(*Continued on Page 24*)

Presented with Honorary Life Membership—*On Saturday, June 20, at Hotel Carter in Cleveland, during the 1942 convention of the United Typothetae of America, United States Public Printer Augustus E. Giegengack was presented with an Honorary Life Membership in the Association by President Otis H. Johnson of Washington, D. C. Responded the Public Printer: "I feel highly complimented, especially since this is the first time in the history of the UTA that a dues-paying member has been so honored." Typographically, the Certificate was simply but beautifully executed and was printed letterpress—it was a limited edition consisting of one copy.*

- *Through its representative, E. W. Palmer, newspaper mechanical executives discovered that WPB is a human organization, has the biggest industrial coordinating job in history on its hands, and is trying in every way possible to enable the newspaper printing industry to get along consistent with war's prior needs.*
- *Progress is being made among newspapers in charging a reasonable hourly rate for display advertising store corrections—11 executives indicating that charges have been instituted by their papers since the 1941 mechanical conference in Buffalo.*
- *Further newsprint conservation demonstrated by Production Manager John A. Burke and associate executives of the Gannett Group by presenting 14 page section showing various treatments for eliminating full-page width folio lines by substituting 1 to 3 col. folios within the regular page area, and by attaching the full-width folio to the plate cylinder of the press. By this means up to 4 in. per page additional space can be obtained.*
- *Pressroom Superintendent Auburn Taylor of the Charleston (W.Va.) Gazette, made a progress report upon the development of carbon base water ink for printing newspapers. Specimen section demonstrated greatly improved printing quality over a year ago. War emergency temporarily holds up further modification of press parts needed to obtain best results.*
- *According to Manager Walter E. Wines, 321 mechanical executives and 212 manufacturers' representatives registered for the Chicago Conference—a total of 533 persons.*
- *Cleveland was selected by the Mechanical Committee for the 1943 conference.*
- *Without reservation, it can be stated that those attending the conference devoted more time to technical information than at any preceding conference. There was a greatly increased percentage of plant visitation and more "printing of editions" in hotel rooms outside of stated conference sessions. Attendance at stated sessions was uniformly consistent. WPB couldn't have asked for greater interest in its aims and objects among mechanical executives.*
- *Some discussion was had about printing on newsprint by offset and gravure. Reports are that it can be done successfully.*
- *Conservation and substitutes were uppermost in the minds of mechanical executives. Suggestions for extending the life of stereotype molding corks, press blankets and photoengraving materials were made freely on the conference floor.*

CONSERVATION

of materials and improving production are main topics at Chicago ANPA Mechanical Conference—E. W. Palmer of WPB enlightens executives about their role in war time

By MacD. SINCLAIR

IF the speaking appearance of Assistant Chief E. W. Palmer of the Printing and Publishing Branch of WPB before the Chicago ANPA Mechanical Conference held in the Drake Hotel, Chicago, from June 8 to 10 served no other purpose than that of showing newspaper mechanical executives that the War Production Board is a very human organization with a tremendous job on its hands, the effort alone would have been distinctly worthwhile. In E. W. Palmer, Chief Donald M. Nelson of the War Production Board and Chief George A. Renard of the Printing and Publishing Branch have a representative who brought the War Production Board very close to the hearts of ANPA newspaper mechanical executives.

As Mr. Palmer's talk progressed, it was plainly apparent that his hearers went along with him as the speaker explained the functions, the necessity for and the purposes of the War Production Board. It wasn't a case of an indifferent group of American citizens but rather a group of men who up until the speaker's explanation had been offered did not comprehend fully the necessity for 100% cooperation with the War Production Board in relation to the newspaper printing industry.

Threaded throughout Mr. Palmer's address was the intimation that the War Production Board is putting the newspaper printing industry upon an honor basis. In other words, WPB formulates the orders and passes them on to industry. Industry then is expected to observe WPB's wishes voluntarily.

The speaker explained carefully the necessity for cooperation by the industry. First he called attention to the size of the printing industry as a whole. "Most printers," said Mr. Palmer, "don't have any conception of the magnitude of the printing industry in general. With its 43,000 establishments, it is the second largest industry in number of establishments. It is the fifth largest industry with respect to the value added by manufacture. According to the last census, this amounted to $3,165,000,000."

The printing industry, up until the present moment, has been touched lightly by the war, but from now on it faces serious curtailments. The variety and volume of supplies and materials may have been the cause of the lack of complaints which have marked other industries. With respect to conservation and substitution of materials it is difficult at times to make American citizenry see where the necessity for one leaves off and the other begins. Quoting Chairman of the Requirements Committee, Wm. L. Batt, he said that American mass production methods will cause all of us to feel the war as it swings into action and civilian economy will go into a subsistence standard. Civilian industry must get ready to patch and pray to keep all industry together.

The program calls for increased search for substitutes and conservation of waste. This is a materials war and from now on it will also be a production war. We must find widespread substitutions and search for available or useable substitutes. Research is the answer. America, in all her history, never has failed to find a substitute.

On July 1, the war production program swings from a priorities basis to an allocation system and will affect all industry. The newspaper industry might group its future problems in five categories: (1) Materials, (2) Manpower, (3) Transportation, (4) Advertising, and (5) Circulation.

Some fear has been expressed that a large number of the 12,000 newspaper plants in the United States may face closed doors because of loss in advertising revenue, inability to obtain materials, curtailed job work and the low equipment conversion potential in relation to war production. The larger papers, however, having important maintenance equipment such as lathes, shapers and grinders, may find it possible to engage in the manufacture of direct war items as sub-contractors to nearby prime contractors.

The increase in circulation levels of newspaper in wartime in relation to the decline in advertising volume is a serious problem.

Conserving Ludlow Matrices

AT the recent Chicago ANPA Mechanical Conference, Fred L. Mosier of the Ludlow Typograph Co., in speaking of conservation of equipment, reported that Ludlow matrix cases in one of the Gannett Group of newspapers are cleaned once a month by means of compressed air hose to eliminate any abrasive dust which might injure the matrices. He also stated the lower section of matrices in each compartment are rotated at this time by placing them on top so that all matrices will receive as uniform usage as possible.

Makes Progress Report

PRESSROOM Superintendent Auburn Taylor of the Charleston (W.Va.) Gazette, *who is working in conjunction with Dr. I. Drogin of United Carbon Co., Inc., of the same city, on the development of water-base carbon ink to replace oil-base inks in newspaper printing, made a progress report. At this time, a specimen eight-page section of the* Gazette *printed with the water-base ink was distributed among the executives. Mr. Taylor discussed some of the obstacles which were yet to be overcome but expressed himself as confident that all of these technical problems would be solved. Just at present, however, progress in overcoming some of the problems is being delayed because of difficulties in obtaining needed materials from which to make modified press parts necessary to elimination of imperfections in printing with the water-base ink. The demonstration section printed under regular pressroom production conditions shows a distinct improvement over first announcement a year ago.*

Possibly not later than September 15, the transportation problem will affect the newspaper printing industry because newspapers must move heavy tonnages of newsprint from the paper mills to its plants and then move it out again to the reading public with little loss in the original tonnage.

Mr. Palmer presented figures which showed a sharp drop in newspaper national advertising lineage caused by conversion of consumer goods advertisers' plants from civilian to war production. In the national magazine field, the drop in advertising now consists mostly of wise and necesssry institutional advertising.

The printing equipment manufacturers, said he, are 100% on the road to war work, but all of these companies will attempt to maintain repairs and parts for existing machinery.

To give some idea of WPB's attitude toward the printing industry, Mr. Palmer said that under the new WPB Uniform Classification System of Services and End Products, which goes into effect on July 1, newspapers, magazines, periodicals and books including all commercial printing (except playing cards) rank seventeenth in utility under the sub-title, Education and Information Classification. "This," said the speaker, "gives our industry a definite place in the sun if any industry can be said to have such a place."

Mr. Palmer stated there is no apparent shortage of newsprint. In 1941, four million tons, of which 73½% was of Canadian production, was consumed in this country, while one million tons was manufactured in the United States. Canadian mills are producing about 80% of capacity and general paper producing mills in the U. S. dropped last month from 104% to 92%. In 1941 about four million tons of newsprint were required to feed the cavernous maws of United States printing presses. Because of the impending transportation problem, the speaker suggested maintaining an adequate newsprint inventory, "But," he added, "don't try to corner the market."

The speaker then continued the materials outlook for the newspaper printing industry by stating there is plenty of black ink and, for the present, the same is true of colored inks. Black ink may become brownish because toners may be hard to get. The printing ink manufacturers, however, have found means for providing substitutes to enable the industry to get along with essential printing inks of all kinds. He warned the industry that it would be best to conserve the use of materials because there is always the likelihood that WPB may find it necesssry to put into effect a curtailment program.

At right is shown Assistant Chief E. W. Palmer and at left Mechanical Consultant Leon A. Link of the Newspaper Section, Printing and Publishing Branch, WPB. Both men addressed the recent Chicago ANPA Mechanical Conference.

Zinc is becoming tighter. Even though there is no immediate prospect of further curtailment he urged conservation in its use. "Keep in mind that if you can use zinc more than once, by all means do it," he concluded.

If the industry continues to nurse along its nitric acid requirements, the total annual consumption of which in the newspaper industry is nine million pounds, there is no immediate prospect of curtailment in this material.

Lead is comparatively easy to date with respect to the printing industry. Tin is at present fully as critical as aluminum. Aluminum, at a later date, should be more free. Antimony is in a fair state of availability.

Now available up to 70% of its former usage, copper likely will become more scarce. Its scarcity, however, will be dependent upon how well the printing industry cooperates in getting old plates back into use. Polished sheet copper as used by photo-engravers is considered by WPB to be a manufactured product and therefore should not require an A-1-J rating on the part of the photo-engraver to obtain. Copper is becoming increasingly more difficult to secure, except on a high rating.

The speaker then explained briefly the new allocation system, which will supplant the priorities system shortly. The allocation system is a wholesale means for handling vital war materials and the priority system really is a retail method. Regarding the printing industry, the speaker said "WPB should be able to get to you minimum subsistence quantities. The printing industry doesn't consume much metal (less than 3% of total metals consumption) in relation to that consumed by industry in general. But it must find a means of getting old and idle metals out of 43,000 printing establishments. If the industry cooperates wholeheartedly, he believes it can 'live off its own fat' for months." He advised newspaper executives not to worry about the Production Requirements Plan for the present. WPB will notify newspapers if their anticipated consumption of metals

Practical Conservation Plan

IN its current display advertising, Lanston Monotype Machine Company is presenting a practical plan by means of which printing plants (and appropriately enough, mechanical executives) can put into effect a plant conservation plan through which production efficiency can be improved and thus the war effort will be assisted greatly.

It is the feeling of *Printing Equipment Engineer* that printing plant production and mechanical executives, if they have not already done so, should take the initiative in going to management with the plan at the earliest moment.

The program is as follows:

(1) Appoint a plant conservation committee composed of the responsible executives in each operating department, the general superintendent to be the committee chairman.

(2) Appoint a sub-committee from each operating department, of which the responsible executive of that department shall be chairman.

(3) Use these sub-committees to make a survey of the entire plant, department by department, and on the findings put into operation such a plan as will secure the best results from personnel and machines, and reduce waste of materials to the absolute minimum.

(4) Scrap all obsolete and inefficient machines of every kind.

(5) Search the plant to the very last and most obscure corner for scrap metals, paper and other used materials.

Halftone Etching Reverse Side of Zinc

DURING the Photo-engraving Clinic at the recent ANPA Mechanical Conference, a discussion on the use of both sides of photo-engraving zinc occurred. Chairman Maurice A. Hagan of the Philadelphia Inquirer *asked Chief Metallurgist Lewis S. Somers of Imperial Type Metal Company, if the structure of zinc plates is the same on both sides with respect to their etching qualities. Mr. Somers stated the structure of the two sides is entirely different. When pouring the metal into the mold, the bottom side of the slab which is next to the mold, is chilled and solidifies quickly, and consequently the grain structure is fine. This is not true of the top side which is exposed to the air where the cooling is more gradual, producing a coarse grained structure in the top surface of the slab. During the rolling of the slab into plate form both surfaces retain these separate grain characteristics. During the finishing operation the fine grained side is polished. This is the side used by photo-engravers for etching. The reverse side carries the acid resist and, as explained previously, is coarse grained. This causes trouble for the etcher if it is used for etching halftones.*

per quarter-year make it necessary for them to come in under this plan.

In discussing this metal salvage program, Mr. Palmer said WPB is doing all it can to create a reserve pool of metals. In considering the plate salvage program, several definitions as to when plates have become obsolete have been proposed. The proposal was made that a plate which had not been printed from for a year is obsolete. However, the commercial printers feel that a plate is not obsolete under three years; the book publishers feel that plates become obsolete in four years.

He suggested that newspapers clean out their morgues every three months. To determine whether or not a plate is obsolete, a good rule to follow is "Has it an assured future use value?".

When the proposed government order for releasing stored plates is put into effect, Mr. Palmer said, the first result should be the salvaging of over 100,000 tons of metal, from which may be salvaged more copper than the industry would normally consume for a year and considerably more lead, tin and antimony than the industry usually consumes in two years.

"Rubber is terribly tight," said Mr. Palmer. He urged complete conservation of all rubber products in the printing industry. Rubber in the amount of 480 tons had been allocated to the printing industry for rubber rollers and other vitally essential needs, but the necessity for conservation is extremely urgent, as a continuation of the allocation is not certain.

The speaker concluded his address by stating "I feel sure the printing industry will cooperate and take the necessary steps to do everything necessary to help win the war. Our contribution as an industry is slight in relation to the entire war program—give it freely and generously."

Link Urges Conservation

Mechanical Consultant Leon A. Link of the Newspaper Section of WPB's Printing and Publishing Branch urged conservation of vital war materials. "The successful operation of WPB's orders is dependent upon how well mechanical executives get old and idle materials back into the industry." He also urged conservation of electric power, especially in those localities where power facilities are strained. "Let's turn off the lights and motors when they are not needed—let's get this campaign going."

Mr. Link presented an interpretation of WPB's Industrial Machinery Limitation Order L-83 as amended and released on May 18. (Editor's Note—See p. 32, June issue of *Printing Equipment Engineer* for complete text of Mr. Link's discussion.)

Air Raid Protection

Arthur Burns, Mechanical Superintendent of the New York *Herald-Tribune*, presented a paper on *Suggestions For Air Raid Protection*. This paper will appear in a later issue.

Rudolph Lent, Business Manager of the Jersey City (N.J.) *Jersey Journal*, suggested that in towns where papers are published in more than one plant, the plants could cooperate with each other to print their papers in case one or more plants were destroyed by air raids. Mr. Burns described the plans which have been made by the nine New York newspapers for cooperation with each other in case of plant destruction. Stereotype mats of mastheads have been exchanged. While the dimensions of some of the papers are of varying sizes, plans for mutual exchange of printing facilities have been made.

Composing Room Session

THE first departmental technical session of the Conference was called to order by Chairman John A. Burke, Production Manager of the Gannett Newspapers, Rochester, N. Y.

Chairman Burke passed the first question to C. Frank Mann. It was related to what can be done to maintain good will among employees. Mr. Mann referred to the human element and its importance in plant management; where the paper can afford it, vacations with pay, life insurance, hospitalization, credit union, sick benefits and the like help immeasurably in maintaining good will and thus encourage work incentive. He also said that the encouragement of new ideas and changes also helped greatly. He quoted from an article he contributed to the June 1940 issue of *Printing Equipment Engineer*. Concluded Mr. Mann: "If the golden rule is observed among employees by the company through its executives good will problems won't exist."

Discussion of what line-composing machine manufacturers are doing with respect to the conditions imposed by the war program was undertaken by Chief Engineer Freund of Intertype Corporation and John Hilpman, Engineering Dept., Mergenthaler Linotype Co. They discussed conformance of machine manufacture with government prohibitions and advised careful machine maintenance, not merely as a patriotic duty but as an economic duty as well. Proper machine maintenance is the best insurance against "hairpin, twine and wire" patching.

Mechanical Superintendent Guy A. Righter of the Richmond (Ind.) *Palladium-Item* and Chief Machinist Joseph Corey of the St. Paul (Minn.) *Dispatch* and *Pioneer-Press*, both praised the value of the Curle matrix anvil tool assembly for repairing line-composing machine matrices.

M. F. Dingman, Cedar Rapids (Ia.) *Gazette*, in speaking on conservation, said that in his plant a responsible person has been delegated to gather stray matrices

Busy were the days for Manager Walter E. Wines at the Chicago ANPA Mechanical Conference. He was attending to inquiries from newly-arrived executives when the photographer happened along.

The ANPA Mechanical Committee in executive meeting at Chicago Newspaper Mechanical Conference, held at Drake Hotel, June 8, 9 and 10. Left to right: Mechanical Superintendent Russell B. Miller, Bloomington (Ill.) Pantagraph; *Mechanical Superintendent Leslie B. Griner, Youngstown (O.)* Vindicator; *Manager Walter E. Wines, ANPA Mechanical Department, New York; Production Manager F. L. Yeager, Indianapolis (Ind.)* Star; *General Mechanical Superintendent John J. Shea, Hearst Newspapers, New York; Pressroom Superintendent Walter Ogden, Cleveland* Press; *Production Manager John Park, Chicago* Tribune *who is also chairman of the Mechanical Committee; Production Manager Leon A. Link, Cleveland* Plain Dealer, *who also is Mechanical Consultant, Newspaper Branch, Printing and Publishing Branch, WPB; John A. Burke, Production Manager, Gannett Newspapers, Inc.; Asst. Chairman of the ANPA Mechanical Committee Arthur H. Burns; Mr. Burns is Mechanical Superintendent of the New York* Herald Tribune; *Photo-engraving Superintendent George Geist, Cincinnati* Times-Star; *Photo-engraving Superintendent Maurice A. Hagan, Philadelphia* Inquirer. *Two members of the committee could not be present. These are: F. H. Keefe of the Newburgh-Beacon (N.Y.)* News, *and Donald P. Miller of the Allentown (Pa.)* Call-Chronicle.

from the floor each day, as well as from the machine matrix trays, after which they are repaired and cleaned promptly. Magazines are inspected every day to insure a full complement of matrices in each channel.

Production Time-Saver

Production Manager B. F. Garrity presented an innovation in effect in his plant. He persuaded the five major department store advertisers in Hartford to furnish two copies of each ad layout when copy for advertisements is sent to the *Times*. He furnishes the paper stock to the advertisers. On one sheet the department store ad writer indicates the large display type and on the other the body type for each ad. In this way a considerable amount of the markup man's time is conserved, the two layout sheets facilitate ad composition and there are a minimum amount of composition errors since the system has been in effect.

There was no general agreement about the question of spreading headletter matrices on a number of machines or confining the head matrices to one machine in a small composing room.

Louis Buisch of the Hornell (N.Y.) *Tribune*, S. J. Scott of the Urbana (Ill.) *Courier*, Composing Room Superintendent Charles Buttermore of the Cleveland *News*, and Russell B. Miller of the Bloomington (Ill.) *Pantagraph*, all spoke of the increased production obtained since confining head composition to single machines. Mr. Miller, however, stated that formerly 22 head styles were used in his plant but the number had been reduced greatly. Since then 20% head composition time has been saved over the former method. E. S. Nagel of the Champaign (Ill.) *News-Gazette*, and Composing Room Superintendent Charles Merkle of the Washington (D.C.) *Star*, also discussed the question. Mr. Merkle feels the question perhaps could be answered by rearranging the headletter matrix fonts on the machines so as to eliminate bottlenecks. Richard Seymour, Mechanical Superintendent of the Schenectady (N.Y.) *Union-Star*, said the arrangement of headletter composition facilities is a problem individual to each plant. He suggested that the composing room superintendent asking the question should get in touch with machine manufacturers' representatives who no doubt would be of assistance in working out a plan for that particular plant.

Production Manager Edwin H. Evers of the St. Louis *Globe-Democrat*, explained the news copy control system used in his plant. The news copy is "tailored to fit" the available space in the day's paper *before* it is set by informing the editorial department how much news space is available in proportion to advertising volume. The result has been a saving of overset to the extent of approximately 175 columns weekly. A page schedule graph is used which is divided into 3 min. intervals. This goes to the makeup editor to enable him to watch the copy flow.

Conservation Methods

Composing Room Superintendent Charles Merkle of the Washington (D.C.) *Evening Star*, outlined the conservation methods instituted in the *Star* composing room. Measures have been put into effect to curb the loose use of spacing material. Margins on proofs have been reduced by cutting down the sizes of proof paper. The *Star's* non-distribution system has been modified so that material such as column rule, slugs and dashes that can be used a second time are returned to the composing room. Mr. Merkle discussed the composing machine maintenance plan utilized by his chief machinist. He said, however, that in the case of the Monotypes, each operator handles maintenance and repair work as the occasion demands. A semi-annual inventory is made of 5½, 7, 8 and 10 pt. news and advertising matrix fonts; 27

Conserving Newsprint by Folio Alteration

AMONG the suggested ways and means for conserving newsprint which came up for discussion at the Chicago ANPA Mechanical Conference, held at the Drake Hotel, June 8-10 was that proposed by Production Manager John A. Burke and executive associates of the Gannett Newspapers. To provide a visual demonstration, a 14 page section made up of pages from various Gannett newspapers was distributed among the mechanical executives. The idea is to eliminate the usual full width folio line with rule at the top of each page and "sink" a fractional column width folio either at the top or bottom of the page, but within the page area. The space thus gained can be utilized to extend the editorial-advertising content of each page. Taken collectively, the various suggested folio treatments by Gannett executives would provide additional space on each page up to as much as 4 in. per page. Pressroom Superintendent J. W. Addison, of the Hartford (Conn.) Times, *proposed that the usual full width folio line be attached to the plate cylinder independently of the stereotype plate while maintaining the full page printing depth which in the case of* The Times *is 22 in. per column. The folio elimination idea created considerable interest among the executives.*

spacebands are maintained in each machine and their dimensional condition is watched carefully by the machinists. Periodically, a slug from each mold is sawed close up under the letter characters, and if air bells are present, the casting mechanism of that machine is gone over immediately to eliminate the air bells. This is done before the stereotype department may have occasion to make complaints about letter characters sinking during the molding operation. All grease cups with the exception of three on the main drive shaft and pulley have been eliminated. The cups were replaced by grease pressure gun fittings. The arrangement of matrix fonts on *Star* machines are analyzed regularly to see if shifting magazines here and there will give better production. Metal trimmings from the Mohr Lino-Saws and machine knives are sifted to detect stray matrices that might otherwise be dumped with the trimmings into the remelting pot.

Composing Room Superintendent Earl Barker, St. Louis *Star-Times*, asked Mr. Merkle how many line-composing machines are in use and how many Mohr Lino-Saws are in use. Mr. Merkle stated there are 43 machines and 41 Lino-Saws. Asked if the saws were in continuous operation irrespective of the class of composition, Mr. Merkle said that at night composition is approximately 90% advertising work. In the daytime, the reverse is true. Use of the saws is conserved wherever possible in the setting of straight-matter composition.

Store Alterations

That "thorn in the flesh" problem of store alterations now came to the floor for discussion. Leon A. Link arose to state that this problem presented the greatest opportunity for production savings in the newspaper composing room. From ⅓ to ½ the time of original ad composition frequently is consumed in store alterations just because the advertiser doesn't know what he wants. Mr. Link stated that during the past year steps had been taken by newspapers in New York, Pittsburgh, Cleveland and Chicago to institute reasonable hourly charges for store corrections. As a conservation measure, the speaker said, this is most important. In response to Chairman Burke's request, representatives of 11 newspapers held up their hands to indicate that that many papers had put charges for store alterations into effect since the last mechanical conference. Mr. Burke then discussed a report made by Mechanical Superintendent Arthur Burns of the New York *Herald Tribune* in which were mentioned clinics held by New York newspapers for department store representatives, including the advertising managers and dispatch desk managers. Simplified composition is advocated at these clinics.

Mr. Link observed that if conservation is good for the store's customers it is also good for the store. He mentioned that stores have instituted new charges for hitherto gratis accommodations such as gift boxes and wrappings. It was generally agreed that the installation of a charge rate for store alterations is purely a business office prerogative, but taken together with the adoption of simplified composition, it is important that excessive composing room costs be eliminated.

Mailing Room Forum

MECHANICAL Superintendent Charles H. Ruth of the Washington (D.C.) *Star*, presided at the Mailing Room Forum held Monday evening. As in the case of the other departmental meetings, ways and means for conserving and salvaging materials and more economical operation were discussed.

Circulation Director Joseph V. Madigan, Cleveland *Plain Dealer*, advised saving clips from wire-tying machines. The *Plain Dealer* sells its old clips to junk dealers.

Mailing Room Superintendent E. M. Happer, also of the *Plain Dealer*, said used wire returned by delivery truck drivers can be used for retying.

The Chicago *Sonntagpost* uses old mats for the tops and bottoms of bundles for local and express delivery, Millard E. Shirts of the Port Huron (Mich.) *Times-Herald*, said his paper uses old copies of papers and exchanges for wrappers.

Substitution of black for galvanized wire used in wire-tying machines, even though it costs 60c per hundredweight less, is not advisable. Lacquer covering and scale on black wire causes excessive wear on the parts of tying machines with which it comes in contact. According to John S. Gorman of the Signode Steel Strapping Co., removal of the scale by spraying or boiling in oil has not proved satisfactory.

Mr. Gorman, in reply to queries about future supply of galvanized steel wire could give no assurance that it would be uninterrupted. Even if the amount of zinc necesssry to galvanize steel wire is comparatively small, both the zinc and the steel from which the wire is drawn are critical war materials. He explained that the equipment for drawing the wire is ample and added that his firm expected to make deliveries.

Newspaper executives have not been asleep in attempts to find a useable rubber tire substitute for delivery trucks. Production Manager Edwin H. Evers of the St. Louis *Globe-Democrat*, discussed a wood-sectioned, steel-rimmed tire which was experimented with by his delivery force. When used on a Dodge truck at 15 miles per hour, the vibration was so excessive that parts started to come loose. Experimentation is being continued with horse-drawn trucks.

Other devices for conserving materials were reported upon. One of these is a spot welding device developed in the plant of the Toronto *Star* by means of

A NUMBER OF THE MECHANICAL EXECUTIVES AND MANUFACTURERS' REPRESENTATIVES ATTENDING CHICAGO ANPA MECHANICAL CONFERENCE.

1—*John S. Plummer, Chicago Agency Manager, Intertype Corporation*; *Walter Crannen (formerly Cincinnati Enquirer Composing Room but now unconnected)*; *Joseph J. Cory, Chief Machinist, St. Paul (Minn.)* Dispatch *and* Pioneer Press.

2—*Vice President Don Crews, Sam'l Bingham's Son Mfg. Co.*

3—*Harvey Brundage, President A. J. Cline, C. A. Loefgrin and Vice President Jack Parks of Cline Electric Mfg. Co.*

4—*Ellis Speer, Composing Room Superintendent, Raleigh (N.C.)* The News and Observer; *Oren Smith, Ludlow Typograph Co.*; *Composing Room Superintendent Al Oberg, Flint (Mich.)* Journal.

5—*Mechanical Superintendent Leven Deputy, Dallas (Tex.)* News *and Vice President Arthur Dressel, R. Hoe & Co.*

6—*K. B. Jaquith and E. P. Lacure, Duplex Printing Press Co.*

7—*Mechanical Superintendent Wm. V. Cowgill, Cleveland* News; *Karl Nibecker, Imperial Type Metal Co.*; *Blanchard Wilson, Stereotype Superintendent, Cleveland* News.

8—*Douglas C. McMurtrie, Ludlow Typograph Co.*

9—*Mechanical Superintendent Earl Anderson, Rockford (Ill.)* Register-Republic & Star.

10—*Lieutenant Cortland J. Strang, USN, and Clarence Seaman, Imperial Type Metal Co.*

11—*Production Manager Elmer Aslinger, Greensboro (N.C.)* News-Record, *and W. W. Warfel, Chemco Photoproducts Co.*

12—*R. M. Fitzgerald, Production Manager, Worcester (Mass.)* Telegram & Gazette; *Production Manager Joseph J. Mahoney, Holyoke (Mass.)* Transcript-Telegram; *Earnest Green, IPI representative.*

13—*Composing Room Superintendent C. Frank Mann, Louisville* Courier-Journal *and* Times.

14—*Harry L. Gage, Mergenthaler Linotype Co.*; *Mechanical Superintendent Louis W. Woelfel, Buffalo (N.Y.)* Evening News; *Walter B. Patterson, Mergenthaler Linotype Co.*

15—*Private E. J. Hundt, Chicago Air Corps Recruiting Office*; *R. J. Walker, Photo-engraving Superintendent, Atlanta* Constitution.

16—*W. C. Brown, Mechanical Superintendent, Minneapolis* Star-Journal and Tribune; *Walter Huber, President, J. M. Huber, Inc.*; *Joseph Pezdirtz, Mechanical Superintendent, Des Moines* Register and Tribune.

17—*Pressroom Foreman Ed K. Sparks, Chicago* Herald-American; *Pressroom Superintendent Walter Ogden, Cleveland* Press.

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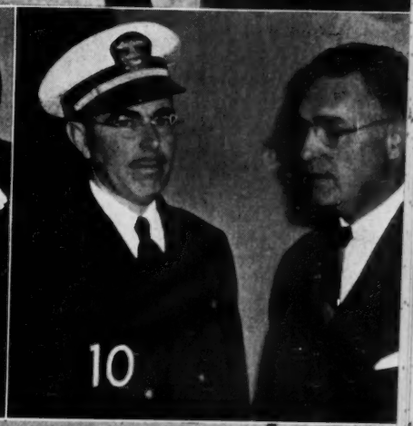
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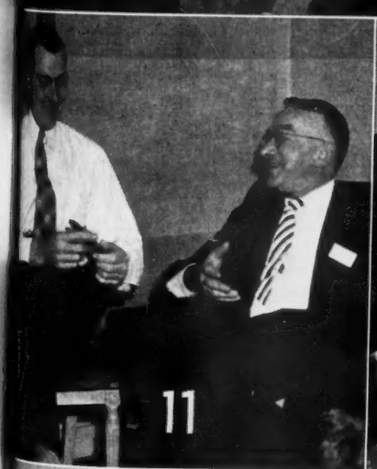
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which 35% of the tying wire is conserved. It was reported that the welding process does not damage any of the papers in a bundle. By means of another device developed in the *Star* plant, 30% less wire is used in tying by using a device which squeezes the air from the bundle.

Mechanical Superintendent Al Rosene of the Duluth (Minn.) *Herald* and *News-Tribune*, described a device developed by Machinist John Breen in his plant for use on Gerrard wire-tying machines. By means of the device it is possible to use 18½ gauge wire instead of the customary 17½ gauge wire. This results in a saving of 28 ft. of wire per lb. or a total of 60,000 ft. of wire per year. The length of the wire clips has been reduced from 3⅜ in. to 1⅞ in., thus saving 1¼ in. of wire on each tie.

Some discussion was had on the use of newsprint as a substitute for kraft paper wrappers. When the bulk is not excessive and the mailing distance is not too great, the newsprint is satisfactory if the newsprint is used in full length with several wraps for Sunday papers. Circulation Manager A. H. Pruett, jr., of the Charleston (W.Va.) *Gazette*, stated that this had been the practice of his paper since 1912 and the method had been found satisfactory.

Mailroom Superintendent J. Menard, Des Moines *Register & Tribune*, said that no wrappers at all are used when 25 or more papers are delivered to a single destination. The papers are counted and deposited in mail sacks. This method has been satisfactory throughout the territory.

Wrappers, rope, wire ties and extra employment savings were reported through the use of the Metropolitan Plan by Circulation Director Matt Sullivan of the Gannett Newspapers. Bulk papers are furnished the drivers and a delivery chart in the truck is used for count. Even though the drivers object to the time required for counting the papers at each stop, he feels that this method involves no more effort than if the drivers sort the bundled papers before starting the delivery trip.

Stereotype Clinic

ON Tuesday morning, Mechanical Superintendent Arthur H. Burns presided at the stereotype meeting. The opening discussion was concerned with regulating water temperature and flow through stereotype plate casting boxes to produce plates of uniform quality. Robert J. Longmore of the Chicago *Tribune*, Clark Means of the Rock Island (Ill.) *Argus*, P. E. Silver of the St. Louis *Globe-Democrat*, Chief Engineer Huck of R. Hoe & Co., E. P. Lacure of Duplex Printing Press Co., E. A. Rehm of Wood Newspaper Machinery Corporation, Blanchard Wilson of the Cleveland *News*, George Fuller of the Cleveland *Press*, and G. A. Disher of the Southam Newspapers, Montreal, Can., all entered into the discussion which was precipitated by V. E. Scott of the Portland (Ore.) *Journal*.

Mr. Longmore asserted that where a non-automatic device is in use for cooling the water he feels it's a question of the human element. Clark Means discussed a device installed by Roy DuSell of the Aurora (Ill.) *Beacon-News* on his stereotype plate casting equipment. It consists of an ordinary automobile thermostat and opens to let in cool water when it has reached a temperature of 110 deg.

E. A. Rehm described a water temperature regulating device obtainable from his company but said it was applicable only to junior autoplates.

P. E. Silver described the cement asphalt-lined tank on top of the *Globe-Democrat* building with thermostatic control by means of which water is kept at a temperature of 75-80 deg. George Fuller observed that a lot of water volume with relatively low pressure is required in cooling systems. Some plants utilize high pressure with less volume. Wm. F. Huck described a device available from his company. E. P. Lacure stated smaller papers can't afford elaborate cooling systems such as are used by the larger papers and described a flush valve arrangement similar to a water closet valve which is suitable for the purpose. G. A. Disher asserted that in localities where the water is hard all papers eventually will have to install water recirculating systems. Soft water systems not only eliminate scale in casting boxes but they also eliminate the uncertainty of hot spots in the plate.

The topic of cork molding blanket conservation and substitutes was next introduced by Chairman Burns. Wm. F. Grenier of New England Newspaper Supply stated that felt can be used for molding purposes and can be made to have the same relative density as cork. Felt was used years ago for this purpose and if stereotypers have to do it, felt can again be used. If it is necessary, news stock can be used for molding if the worst happens. Orel Harper of the Tulsa (Okla.) *World-Tribune*, reported he was using discarded rubber press blankets in combination with bakelite board and felt for molding purposes.

It was reported that battleship linoleum can be used as a substitute for cork. Between 600 and 700 molds can be obtained by placing the burlap back next to the cylinder of the machine. The linoleum softens with use. Blanchard Wilson stated he had tried battleship linoleum but found that it breaks easily. He advised, however, that the size should be such that its edges will not overhang the chase.

Artie Nelson, NEA, Cleveland, arose with the pithy remark: "Try and buy battleship linoleum!"

Wm. H. Lacker of the Indianapolis *News* reported a successful experiment in regenerating compressed cork blankets. He immersed the blanket in almost boiling water for 15 min., then placed it in a gas scorcher for a half hour, afterwards laying it flat on a table and leveling it off by hand with emery cloth held around a block. In one instance he used a regenerated blanket for half a day with successful results.

The cleaning of water jackets was discussed principally by George Fuller, E. A. Rehm and Robert J. Longmore. Skasol and Water Jacket Cleaner were mentioned among the scale removers. Messrs. Fuller and Longmore mentioned cleaning the strainers in automatics regularly. Mr. Longmore finds it necessary to clean his strainers twice a week.

Wm. F. Grenier suggested that old cork blankets be saved. After they have been given a rest period many more molds can be secured from them. Asked if new corks could be made from old, discarded ones, Mr. Grenier said the answer is "no." He promised, however, to look into it. Edgar Mills of Eastern Newspaper Supply says that a negative answer must be given with respect to using old cork blankets to make new ones.

In response to a question from the floor, Edgar Mills stated that stereotype packing felt probably will remain one of the most easy of the supplies items to secure and does not anticipate any difficulty in the future.

Karl Nibecker of Imperial Type Metal Co., in discussing the stereotype metal

(*Continued on Page 34*)

Reuse Bundle Wire

TO replace the manila twine which district men formerly tied up returns from editions of the Indianapolis Star, *Production Manager Lester Yeager reports that wire which is used on bundles of* This Week *magazine shipped to the* Star *from Chicago is saved and placed in a box. The box is located in a convenient place where the district men can secure the wire for tying up returns in place of the manila twine.*

Speaks at Craftsmen's Convention— *Hon. Augustus E. Giegengack, United States Public Printer, and a former President of the International Association of Printing House Craftsmen, will speak at the Grand Rapids Craftsmen's Convention to be held in Grand Rapids, Mich., August 10-12.*

Equipment and Supplies

Craig Dri-Spray for Preventing Offset

To prevent offset in the press delivery, the Craig Dri-Spray sprays a dry powder upon the printed sheet at very low pressure. The cloud of powder-laden air is ejected by syphoning through a powder feed valve located at the top of the spray tank and is applied to the printed sheet by means of spray heads consisting of one or more jets, or spray tubes, containing a multiplicity of ports or jets. The powder-laden air is sprayed as close to the printed sheet as the design of the press will permit (usually within a few inches). Manufacturer states the spray delivery being within a few inches of the sheet, it is below the face of the operator and is not inhaled by him as he watches his work at the delivery pile.

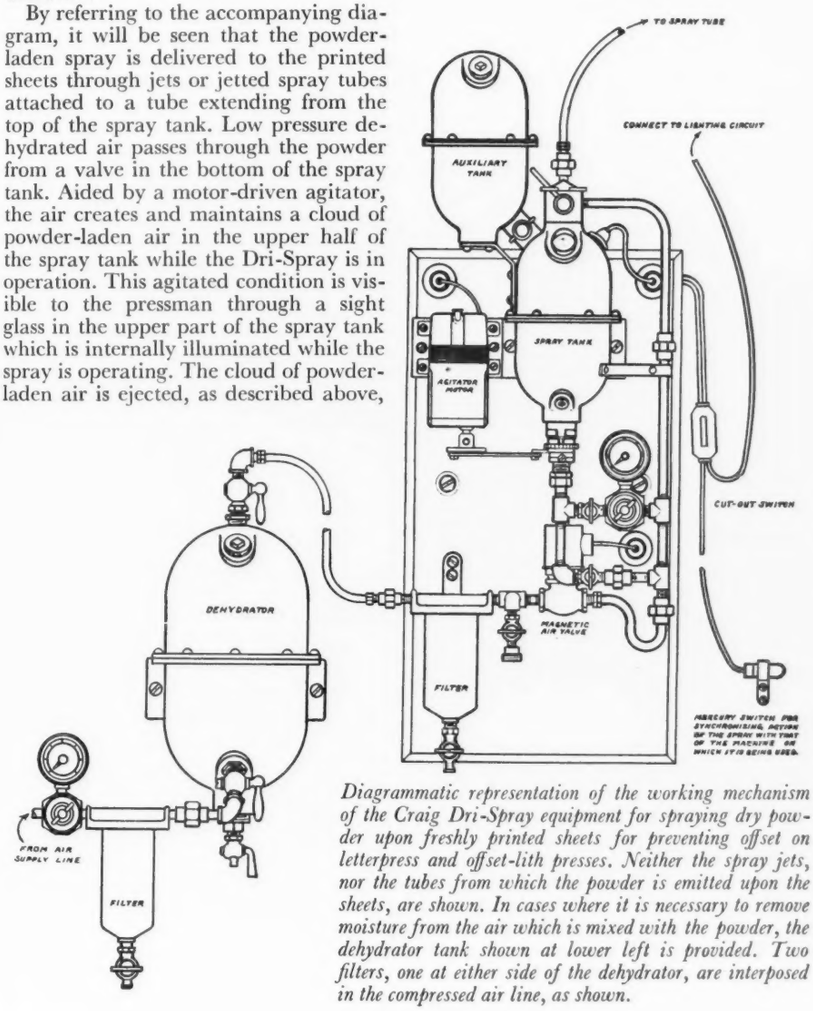
The Craig Dri-Spray equipment consists of a spray tank and an auxiliary supply or storage tank, together with the mechanism necessary for operation. It is mounted upon an electrically wired panel 11½ in. by 21 in. Overall size is 13 in. by 30 in. by 8 in. No floor space is required since the unit can be attached to a wall, post or any vertical surface available.

By referring to the accompanying diagram, it will be seen that the powder-laden spray is delivered to the printed sheets through jets or jetted spray tubes attached to a tube extending from the top of the spray tank. Low pressure dehydrated air passes through the powder from a valve in the bottom of the spray tank. Aided by a motor-driven agitator, the air creates and maintains a cloud of powder-laden air in the upper half of the spray tank while the Dri-Spray is in operation. This agitated condition is visible to the pressman through a sight glass in the upper part of the spray tank which is internally illuminated while the spray is operating. The cloud of powder-laden air is ejected, as described above, by syphoning through a powder feed valve located at the top of the spray tank and is applied to the printed sheet by means of spray heads consisting of one or more jets, or by jetted spray tubes extending across the printed sheets.

To spray any dry powder satisfactorily, it is absolutely necessary to provide moisture-free air. Where moisture is present, lumping or clogging of the powder occurs. A dehydrator is furnished with the equipment when necesssry to insure a supply of air that is free from moisture. The overall size of the dehydrator is 10½ in. by 22 in. by 7 in., and its base size is 2½ in. by 6½ in. Filters are provided to trap any foreign matter in the air line.

The Craig Dri-Spray equipment is automatically actuated with the starting and stopping of the press.

Manufacturer states a report of a test made at a press in a printing plant and issued by the Metropolitan Life Insurance Company, shows a dust count of 1.4 as compared with dust counts of air in various parts of New York, N. Y., varying from 1.3 to 2.8, and of subway and railway station air showing a dust count of 3.9.



Diagrammatic representation of the working mechanism of the Craig Dri-Spray equipment for spraying dry powder upon freshly printed sheets for preventing offset on letterpress and offset-lith presses. Neither the spray jets, nor the tubes from which the powder is emitted upon the sheets, are shown. In cases where it is necessary to remove moisture from the air which is mixed with the powder, the dehydrator tank shown at lower left is provided. Two filters, one at either side of the dehydrator, are interposed in the compressed air line, as shown.

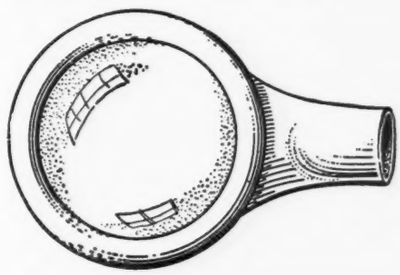
According to production records of one of the concerns using the Craig Dri-Spray, the cost for spraying 11 in. by 13 in. coffee bags, calculated on a basis of 48c per lb. in 100 lb. lots for the spray powder, is $10.50 per million bags, or approximately 1c per thousand bags.

The Craig Dri-Spray is intended for use on high-speed multi-color rotary presses with rewind deliveries, special label and ticket presses, envelope machines, paper-coating machines, carton and box printing machines, photo-gelatine presses, and all types of tag-making machines, as well as the various makes, styles and sizes of printing and offset-lith printing presses in general use.

Further information may be obtained from Craig Corporation direct, or in care of *Printing Equipment Engineer.*

Magnifier with Flexible Mounting

Mark Specialty Co., 89 Westminster Rd., Rochester, N. Y., has developed a magnifier mounted in flexible material especially for use by printers for examining type, halftones, rule joints, press



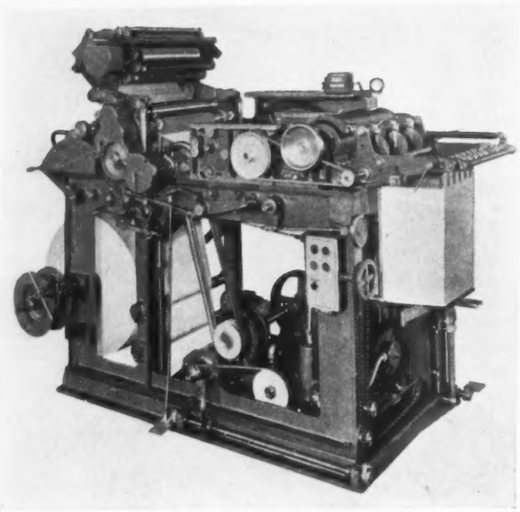
proofs and the like. Outside diameter of the mounting is 1½ in. The glass is of the order of 6x or 8x. The lens is protected from injury when the magnifier is laid down by a high beading to hold the lens from the surface upon which the magnifier is laid. Can be slipped on the end of a pencil.

L.P.M. Web Offset-Lith Press

The L.P.M. Web Offset-Lith Printing Press is rated by manufacturer at 20,000 impressions normal net production per hour, although its speed range is from 10,000 to 30,000 i.p.h. This job press which feeds from a roll, delivers sheets out to size, and lithographs one side in one color, is intended to handle short runs as advantageously as long runs. Floor space required is 3 ft., 6 in. x 6 ft.

The maximum image face is 8 3/16 in. x 14 in., making it possible to print a maximum surface, using 14½ in. paper, of 8 3/16 in. x 14 in., bleeding on the 14 in. dimension, the maximum size of the finished sheet being 8½ in. x 14 in.

The press is furnished with a fixed 8½ in. cutoff. A 17 in. cutoff can be supplied if desired. With the 17 in. cutoff, forms can be delivered two on a sheet (assuming that the size of the forms is 8½ in. by 11 in., or 8½ in. by 14 in. For instance, an 8½ in. x 11 in. form can be delivered two-up on a sheet 17 in. x 11 in., and an 8½ in. x 14 in. form can be



View of L.P.M. Web Offset-Lith Printing Press. Maximum image face is 8⅜ in. by 14 in. Can be provided with 8½ in. and 17 in. sheet cutoff. Speeds claimed to range from 10,000 to 30,000 i.p.h. with 20,000 i.p.h. representing normal net production per hour.

delivered two-up on a 17 in. x 14 in. sheet.

The maximum diameter of roll paper which the machine will accommodate is 28 in., wound on either 3 in. or 5 in. cores. Roll changes can be made in not to exceed 10 min. The press is designed to handle any stock from onion skin to index bristol. Manufacturer states production of the very light and the very heavy stocks averages more than half of the normal net.

Zinc plates used on this press are 0.006 in. thick. It is recommended that plates be purchased in size 19½ in. x 30 in. to make it possible to prepare plates four-on, and then these can be cut down to 9¼ in. x 14½ in., which is the size of the press plate. Plates may be made by egg albumen or deep etch process. Plate changes can be made in 5 min.

Perforating units for perforating in the same direction as the web runs can be supplied.

The press is powered with a 1½ h.p. A.C. motor combined with a variable speed control for any press speed between 10,000 and 30,000 i.p.h. Built-in control equipment consisting of stop, run and inch buttons and necessary wiring are ready for attachment to main line connection.

Bijur central lubrication for oiling all moving parts automatically is provided together with an oil gauge to indicate when lubrication is being properly done. A few points, such as slow moving non-rotating parts, cams, etc., are oiled with a hand oiler.

The L.P.M. press, although not exactly a new development, was perfected at a comparatively recent date. It was decided about a year ago to build a lot of 25 presses. Some of these presses are in production operation.

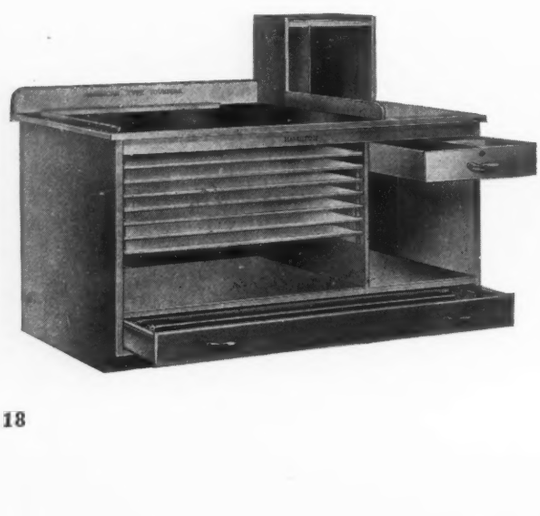
W. H. Franklin, 1835 East 23rd St., Cleveland, exclusive selling agent for Lithograph Press Mfg. Co., states that machines from this lot can be furnished subject to WPB regulations. When the present lot of machines has been exhausted additional machines will not be available until after the war.

Offset Press Work Table

American Type Founders has announced a wood constructed work table and storage cabinet especially designed for use with offset-lith printing presses, in two sizes. The length of the smaller size is 52 in. by 27 in. deep by height of 35 in. from floor to table top. The length of the larger table is 65 in. by 32 in. depth by height of 35 in. from floor to table top. Overall height of both tables is 50 in.

One end of the top working space is equipped with guides for checking register of printed sheets, and on the other end if a plate glass for mixing inks. A tool drawer with compartment and lock is provided. There is a deep drawer for five spare rollers and dampers. Included are seven sliding shelves for packing sheets, press OKs, printed samples, spare blanket and press plates. A compartment is provided for job tickets, inks, spaces for roller wash-up device and press chemicals.

The work table is finished in olive green enamel with black masonite top and shelving.



View of ATF's Offset Press Work Table. Constructed of wood in olive green enamel finish, black masonite top and shelving.

Wilsolite Fibre Matrix

Wilsolite Corporation has announced the Wilsolite Fibre Matrix for use in molding rubber printing plates. The matrix stock is made from long Spanish spruce wood pulp impregnated with furfurol blended resins. Manufacturer states this combination of materials produces a matrix with an immovable rock-bottom floor. The matrix, during plate-making operations, is easy on type, reproduces screens excellently, its polished surface permits easy stripping, the matrix lays flat after molding, additional plates are of the same tolerance as the first.

The Wilsolite Fibre Matrix is furnished in sheets 19 in. by 24 in. Each sheet weighs approx. 2¾ lbs. Further information may be secured from Wilsolite Corporation direct or through *Printing Equipment Engineer*.

Walter Huber Injured

The many friends of President Walter Huber of J. M. Huber, Inc., will regret to know that he suffered a serious accident on Saturday, June 20, while inspecting a weed-spraying device at his home, Mt. Kisco, N. Y. It seems that the plunger from the compressed air tank became unlocked, striking him on the head, causing a compound fracture. While his condition was reported critical, his progress is favorable and there is every hope for prompt recovery.

Craftsmen Machinery Moves

Craftsmen Machinery Company, it has been announced by President Charles Alpert, has moved to a company-owned building at 575-579 Atlantic Ave., Boston. The building is composed of six floors and provides about 70,000 sq. ft. of floor space.

Staff Kept Intact

Despite the curtailment of peacetime product manufacturing, The Timken Roller Bearing Company's staff of field engineers is being kept virtually intact to engineer and service hundreds of new wartime applications in various parts of the United States. The few field engineers who have been called to the home office to help in the company's 'round-the-clock production of many new war items will assist in this work for the duration, after which they will resume field engineering work in their respective divisions.

Now An Ensign

Robert H. Flint, son of Howard Flint and secretary-treasurer of the Howard Flint Ink Co., and a brother of Edgar Flint, recently received his commission as ensign in the United States Naval Reserve. He is stationed at Newport, R. I.

End Use Symbols for Purchase Orders

OF particular interest to production and mechanical executives and purchasing agents in newspaper, magazine, book and all establishments engaged in printing, lithographing, platemaking, blue-printing, photostating, etc., is Priorities Regulation No. 10, Allocation Classification System, issued on June 2 by WPB.

Priorities Regulation No. 10, effective July 1, provides a simple, uniform classification system which will enable WPB to trace the flow of materials in terms of end use, from primary producers to finished products.

The purpose of requiring the use of the proper symbol on purchase orders is to enable WPB to allocate materials to industry intelligently. To allocate intelligently, it is necessary to know for instance, whether the materials are going to tanks, destroyers, railroads, or to office machinery. In addition, it is necessary to know in a general way what type of purchasers eventually will receive particular products of industry, i.e., whether the products eventually will be delivered to the army, navy, etc.

The Regulation provides a symbol for each of many kinds of industries specified. Numbers ranging from 1.00 to 23.00 have been assigned to all major classes of military, industrial and civilian uses.

The printing and publishing industry comes under Class 17.00—Education and Information. The symbol for the Printing and Publishing industries has been designated 17.10. Thus, a printing plant in making out a purchase order for printing supplies would place the following symbol on the purchase order:

DP—17.10

The letters "DP" preceding the symbol "17.10" indicate Domestic Purchases. The figures "17.10" indicate that the materials itemized on the purchase order come under the Printing and Publishing sub-division of "Class 17.00—Education and Information."

The symbol "DP-17.10" *is not* a preference rating. It is to be placed on the purchase order *in addition to* the A-10 Under P-100 Preference Rating statement which printers have been using on their purchase orders for some time. As is stated above, the new symbol on a purchase order is to indicate to WPB the *end use* of the materials contained in the order.

Those firms coming under the 17.10—Printing and Publishing classification are: Blueprinting, Bookbinding and related industries, Books printing and publishing of, electrotyping and stereotyping, engraving for plate printing, general commercial printing; Gravure, rotogravure and rotary photogravure plates, manufacture of; Job printing, Lithographing and photolithographing, Newspapers printing and publishing of, Magazines printing and publishing of, Periodicals printing and publishing of, Photoengraving, Photostating, Printing establishments operation of, Printing ink manufacture of, Publishing establishments operation of, etc.

Symbol 8.20—Those coming under the Symbol 8.20 are manufacturers of dextrine and dextrose.

Symbol 8.90—Those coming under the Symbol 8.90 are those operating Paper and paperboard mills.

Symbol 18.00—Those coming under the Symbol 18.00 are manufacturers of Playing cards.

Symbol 19.00—Those coming under the Symbol 19.00 are manufacturers of Calendars, Carbon paper, Envelopes, Hand Stamps, Note-books and ledgers, Paper punches, Pin tickets and Stationery.

Symbol 20.20—Those manufacturers coming under the Symbol 20.20 are as follows: Bookbinding Machinery; Paper mill, pulp mill and paper products machinery, and Printing trades machinery.

Symbol 23.00—Those coming under the Symbol 23.00 are manufacturers of Badges and tags; Fancy boxes for jewelry, combs, toilet sets, etc.; Greeting cards; License tags; Novelties; Paper bags.

Secondary Tin Use Reduced to 75% for Type Metals—Other Orders

Cellophane Use Cut

THE use of cellophane was restricted further on June 8 an amendment to Limitation Order L-20, as issued by the Director of Industry Operations. The amended order covers cellophane or other transparent cellulose sheets 0.003 in. thick or less. The original order covered sheets 0.005 in. thick or less. It has been announced that a new plastics conservation order is being prepared to cover use of sheets over 0.003 in. thick. Additional restrictions imposed by the amended order prohibit use of cellophane in window cartons, for carton overwraps, for animal food packaging and rubber nipples. Added to the prohibitions list is "Candy products and chewing gum except where used as a protection for the product itself."

Chrome Restrictions Eased

PARTICULARLY with reference to the manufacture of pigments and printing ink, restrictions on the use of chrome chemicals were eased June 29 by the Director of Industry Operations. Revisions were made in Orders M-18-b covering various uses of chrome chemicals, and M-53 which relates to the use of chrome pigments in printing inks. The orders cover chrome chemicals only and have no bearing on metallurgical or refractory grades of chromium. Approx. 12% of the total chromium supply is used for chemicals of grades not adaptable for other uses. Order M-53 permits the use of chrome pigments in printing inks of 100% of the amount used in 1941, instead of 70%, and makes other technical changes in the order. Chrome pigments are used in the manufacture of yellow, orange and green inks.

Secondary Tin Use Reduced

TIN Conservation Order No. M-43-a as amended on March 17 by WPB, has been amended again under date of June 5. Certain provisions in the amended order affect the printing and publishing industry.

The use of secondary tin in plates and type metal for the printing, publishing and related service industries, commencing July 1, has been reduced and is limited to 75% of the amount used during the corresponding calendar quarter of 1940.

The use of solder or solder foil in the preparation and manufacture of printing plates is permitted provided that the tin content of the solder or solder foil is limited to 30% by weight. However, beginning July 1, no person shall use more solder or solder foil during any calendar quarter than 75% of the amounts used during the corresponding calendar quarter of 1940.

The provision permitting the reuse of remelt bearing metal originating in the user's own plant, provided that no virgin or secondary tin shall be added thereto, as contained in the amended order dated March 17, is continued.

The provision that no virgin tin may be used in the manufacture or treating of type metal is retained.

Fluorescent Fixtures

FLUORESCENT lighting fixtures using tubes rated at 30 w. or less, have been released from the sales restrictions of WPB Order L-78 on June 13 through publication of Amendment No. 2 to Limitation Order L-78. The order was issued because the lighting fixtures released have little direct use in war plants. Sale and delivery of fixtures using one or more tubes rated at 30 w. or less, or those using high voltage cold cathode) tubes is permitted. Replaceable starters are eliminated from the restrictions of the order. The amendment makes clear that portable lamps regulated by Order L-33 are not covered by Order L-78.

Bronze Powder Stocks Released

BECAUSE there is no apparent military demand for the remaining small stocks of bronze powder in the country, its use by the printing and publishing industry and for other decorative purposes was permitted today by the Director of Industry Operations.

An amendment of Supplementary Order M-9-c-3 permits the use of bronze powder in the manufacture of paste, ink, leaf and paint until December 15, 1942, and prohibits all use of these products made with bronze powder, and bronze

powder itself, for these purposes after December 31, 1942.

The order does not permit further manufacture of bronze powder and permits the use of stocks in the hands of other than manufacturers only.

Apparently, aluminum powders are not included in the amended order.

Agave Twine is Restricted Further

STILL further restrictions in the production of agave wrapping twine, used widely in lumber mills, paper mills, and newspaper plants, are provided for in an amendment to General Preference Order M-84 issued by WPB on June 1.

Processing of agave fiber into wrapping twine had been restricted previously to 65 per cent of the rate of production in 1941. Today's amendment (No. 6) reduces the amount for this purpose to 57.5 per cent in June, 50 per cent in July and 40 per cent in August and each month thereafter.

This country formerly received much of its agave from Java. A considerable quantity comes from Africa. Agave cordage has important military and naval uses.

WPB agave consultants said that the amendment will not result in curtailed production of wrapping twine, which can be made from other materials. For instance, twine is being manufactured from the tow and waste of such fibers as jute and flax. Some mills are experimenting in the manufacture of wrapping twine from paper, used as a wrapper, with an agave core.

Handles Neutralizer Direct

Effective June 1, the Chapman Electric Neutralizer Company began serving the trade directly from its home offices at Portland, Maine. The company will maintain installation service, employing the Chapman Neutralizer installation engineers from the Kidder Press Company. Merle S. Pennell, sales engineer, has reassumed his responsibilities with the company.

The Kidder Press Company and its predecessors, who have served as agents for the Chapman Electric Neutralizer Company, have retired from the agency business effective May 29.

It is reported that more than 16,000 Chapman Static Neutralizers are in use throughout the United States and Canada for neutralizing static electricity developed in manufacturing operations.

Officers of the Chapman Electric Neutralizer Company are: William H. Chapman, Consultant - Director; Richard C. Payson, president; Widgery Thomas, treasurer; and George H. Chapman, general manager.

Thermoplastic Printing Plates

A LONG list of articles made of thermoplastic materials for civilian use in four preferential classifications are appended to WPB's Thermoplastic Order No. M-154 issued on June 27. The order is promulgated because thermoplastics are in great demand for war production.

So far as the printing industry is concerned, the Order affects the use of thermoplastic materials for making printing plates, advertising printing, and advertising and miscellaneous novelties. Thermoplastic material is one of several types of plastics which can be reheated and reshaped, and include thermoplastic synthetic resins and cellulose derivatives.

Up until issuance of the order by WPB, it had been hoped by certain printing plate manufacturers that the use of plastic materials would relieve the pressure on critical metals used for making duplicate printing plates.

From the second stipulation in the above paragraph it appears that those plate-makers who made plates from thermoplastics, apparently will be permitted to use about the same amount as consumed in 1941, but the order will not permit further expansion of plate-making from thermoplastic materials. Those who did not make plates from thermoplastics during the 12 months ended December 31, 1941, cannot make any at all because they did not establish a consumption rate in 1941 upon which to base 1942 consumption of this material.

In the order it is stipulated that war orders are to be filled first from thermoplastic materials without restrictions; then Class I orders may be filled to the extent available. (Thermoplastic printing plates come under Class I). After Class I orders are filled, the remaining available supply is to be used to fill Class II orders up to 50%. Any residual supply over 50% is to be divided equally between unfilled orders in Classes II and III. Until September 1, Class IV will be considered a part of Class III, after which date the use of thermoplastics in the manufacture of articles in Class IV will be prohibited.

It appears that after September 1, thermoplastic materials may not be manufactured into advertising printing, nor for advertising and miscellaneous novelties, inasmuch as these items are listed in Class IV.

Each order for thermoplastics must be accompanied by a certification from the person seeking delivery that (1) He is not building up inventory; (2) His total deliveries accepted during the month in question will not exceed one-twelfth of his consumption for the 12 months ending December 31, 1941; (3) That the end use set forth, together with its classification, will not be violated, and (4) That the resulting scrap will be used in conformance with the order.

Thermoplastic Order No. M-154 covers thermoplastic synthetic resins and cellulose derivatives. Formaldehyde plastics and derivatives are covered by Order M-25, and plastics with elastic qualities are covered by Order M-10, which controls polyvinyl chloride and its derivatives.

National Executive Meeting Dates

American Photo-Engravers Association—Oct. 12, 13, 14, Netherland Plaza Hotel, Cincinnati, Ohio. Louis Flader, Commissioner, A-1446, 166 W. Van Buren St., Chicago, Ill.

A.N.P.A. Mechanical Conference—June 1943, Cleveland, Ohio. W. E. Wines, Manager, A.N.P.A. Mechanical Dept., 370 Lexington Ave., New York, New York.

Illinois Newspaper Mechanical Conference—Ed Nagel, Secretary Champaign (Ill.) *News-Gazette.*

International Association of Electrotypers & Stereotypers, Inc.—A. P. Schloegel, Field Secy.-Treas., 949 Leader Bldg., Cleveland, O.

International Association of Printing House Craftsmen—August 9-12, 1942, Grand Rapids, Mich. Herbert Threlfall, International Secretary, 210 Lowell Ave., Providence, R. I.

International Trade Composition Association—Wm. E. Lickfield, Secretary, 629 Chestnut St., Philadelphia, Pa.

Iowa Daily Newspaper Mechanical Conference—May 16, 17, 18, 1943, Des Moines, Iowa. Paul Kamler, Secretary, Clinton (Ia.) *Herald.*

Iowa Line-casting Machinists Conference—May 16, 1943, Des Moines, Iowa. Carl Bloomburg, Chairman, c/o *Register & Tribune*, Des Moines, Iowa.

National Association of Photo-Lithographers—July 23, 24, 25. Hotel Hollenden, Cleveland, Ohio. Walter E. Soderstrom, Executive Secretary, 1776 Broadway, New York, N. Y.

New England Newspaper Mechanical Conference—Second week-end, October 1942—Hotel Statler, Boston. Walter C. Crighton, Secretary, New London (Conn.) *Day.*

Northwest Newspaper Mechanical Conference—1943 meeting to be announced. V. G. Eck, Secretary-Treasurer, Dunwoody Institute, Minneapolis, Minn.

New York State Newspaper Mechanical Research Conference—February meeting postponed indefinitely. Byron G. Culver, General Chairman, c/o Rochester Athenaeum and Mechanics Institute, Rochester, N. Y.

Pacific-Southwest Mechanical Conference—April, 1943, Los Angeles, California. Fred J. Moyer, Secretary, c/o Los Angeles *Daily News.*

S.N.P.A. Eastern Div. Mechanical Conference—August-September meeting postponed indefinitely. Walter C. Johnson, Secy.-Mgr., P. O. Box 1569, Chattanooga, Tenn.

S.N.P.A. Western Div. Mechanical Conference—February, 1942 meeting postponed indefinitely. C. W. Tabb, Secretary, 723 Texas Bank Bldg., Dallas, Tex.

United Typothetae of America—Raymond Blattenberger, President, c/o Edward Stern Co., Philadelphia, Pa.

TECHNICAL LITERATURE

Production and Mechanical Executives wishing to secure copies of the literature described below may do so by addressing the manufacturer direct, or by sending request to Printing Equipment Engineer. *We'll be glad to pass your request on to the manufacturer. Literature is gratis except where noted.*

Ten Ways To Avoid Offset

A new edition of *Ten Ways To Avoid Offset* has been published by E. J. Kelly Co., Kalamazoo, Mich. The following are discussed in relation to offset: Stock, Makeready, Press Fountain, Rollers, Freshly Printed Stock, Delivery, Static, Form, Dopes and Ink. Booklet consists of 14 pages and cover. If you haven't got a copy of the latest edition, one will be sent to you by Kelly.

Color Acceptance Survey

Color Acceptance—Its Normal Demands and Wartime Limitations, the result of the second annual survey undertaken by Eagle Printing Ink Co., Div. of General Printing Ink Corporation, is now available in booklet form. From the survey among several hundred manufacturers a summary of color-acceptance in many lines of merchandise is presented. Among the commodities investigated are exterior and interior paints and enamels, roofings, rugs and carpets, linoleum, tile, wall coverings, oil cloth, mattresses, blankets, sheets, towels, kitchen ware, tooth brushes, home

(*Continued on Page 32*)

REVISED COMMENT *on WPB orders affecting printing industry issued by Chief George A. Renard of Printing and Publishing Branch*

WAR Production Board regulations and orders which directly concern the Printing and Publishing Industry were brought up to date on June 15 by George A. Renard, Chief of Printing and Publishing Branch. This is the fourth of a series of releases designed to keep members of the industry acquainted with the availability of materials, etc. involved in manufacturing operations. The previous releases were T-166, issued on March 18, 1942; T-199, issued on April 9, 1942; and T-293, issued on May 9, 1942.

Copies of any orders or releases mentioned may be obtained from local WPB offices, or by writing the WPB, Division of Information, Room 1501, Social Security Building, Washington, D. C.

The purpose of this release is to draw your attention to orders and information issued by the War Production Board which affect the printing and publishing industries. This release it is stated, is intended only to serve as a reminder and nothing in it is to be construed as an official interpretation or explanation of any orders issued by the WPB, and it is not to be used as a digest of existing orders of the WPB. In any specific case, you are cautioned to refer to the order in question.

ADHESIVES: No serious shortage at present time.

ALCOHOL: No serious shortage of industrial alcohol is expected, according to WPB Release 1208.

ALUMINUM: In order to receive consideration, users of powder, paste, ink and leaf should submit their inventories of each kind, and the quantity of each kind on hand as of June 6, 1942. Existing inventories must be filed at the end of each month thereafter on Form PD-313 or by letter. Requests for permission to use these stocks should be sent to Protective and Technical Coatings Section, Chemical Branch, WPB, Washington, D. C. Ref: M-1-g.

CONSERVATION: Releases of this branch have explained the conservation of various materials as required by WPB orders and regulations. We are sure that there must be some establishments in our industry that are not in full compliance, particularly with the 70% limitation on copper.

It is the function of the Compliance Branch to investigate these matters and, if any violations are found, to recommend appropriate action. Plants which have not put into effect the necessary conservation measures may soon find themselves in serious difficulties.

CONSTRUCTION: A new directive on construction means that no new plants will be built "unless they are absolutely essential and can meet seven newly-established criteria." This applies to all types of production. Order L-41 also places under rigid control all extensions, additions and alterations (other than maintenance and repair) to existing buildings.

COPPER: Order M-9-c-3 has been amended to extend until December 31, 1942 the use of paste, ink and leaf made from bronze powder, and of bronze powder, in the printing and publishing industries. The amended order does not permit further manufacture of bronze powder; but it does permit the manufacturer to continue, until December 15, 1942, making paste, ink and leaf from bronze powder which was on hand and ready for use by him on or before March 31, 1942. Printer may use all material on hand prior to March 31, 1942, or obtained since May 30, 1942.

All other use by the printing and publishing industries of Copper Products and Copper Base Alloy Products, including scrap, is limited in any calendar quarter to 70% of the usage in the corresponding quarter of the year 1940.

Every electrotyper is urged to make application as soon as possible for authorization to receive and process copper scrap. Form PD-130 (Revised) should be used for this purpose. Four copies of this Form should be submitted. A brief letter should accompany the Form, stating whether the electrotyper, in addition to buying old photo-engravings and electrotype shells, wishes to have scrap melted and cast into anodes, or wishes to have shell copper reclaimed by an outside company. In either of the latter cases the name and address of the outside company should be stated.

ELECTROPLATING EQUIPMENT: Order L-110 restricts the sale, transfer on purchase of electroplating equipment.

FREEZING: It is generally believed that no order freezing materials in the hands of retailers is to be issued unless (a) the material is to be rationed, or (b) there is reasonable assurance of a compulsory program for recapture of the material by requisition or otherwise.

INK: Supplies of finished inks are easy. However, continued avoidance of any wasteful usage is in order.

A pool has been set up for zinc sulphide pigments, one of which is lithopone. This is used as an ingredient of white and light-colored inks. It is not anticipated that this will materially affect the printing industry. See order M-128.

For *Aluminum Ink*, refer to "*Aluminum.*"

INK, GRAVURE: Order M-150 limits, as of June 15, the delivery of aromatic petroleum solvents, used in gravure inks among other items. Other solvents available to the ink manufacturer should still permit delivery of a satisfactory product to the printer.

INVENTORY LIMITATIONS: Quoting from letter by Donald Nelson to National Retail Drygoods Association: "Retailers and wholesalers should avoid making panic decisions in an effort to anticipate a regulation which will not be issued for a number of weeks and will not become operative for several months thereafter."

LEATHER: The June-July quota for goatskin, kidskin, cabretta and India goatskin remains substantially the same as the May quota.

LOOSE-LEAF METALS: Order M-126 forbids delivery or acceptance of steel for the fabrication of parts for loose-leaf metals, rings and posts, and mechanical binding wire (such as "Spiral") after May 20; it prohibits the fabrication of parts or assembling of them after August 3. Any appeals from the provisions of this order must be made on form PD-437, which must be filed at the nearest field office of WPB.

MACHINERY: Order L-83 establishes control over the sale, transfer or delivery of new, or less-than-5-year-old second-hand and rebuilt printing machinery in excess of $200 value. Any person contemplating such sale or purchase should file preference rating application form PD-1A in accordance with the terms of Order L-83 as amended effective date May 18, 1942.

OPA FIELD OFFICES: Field offices are being set up at various points, so that official information and advice will be available to anyone requiring it. Meetings will be held all over the country to explain the price control purposes and methods; local papers will carry advance notices of these meetings and information as to location of field offices.

OPA FINANCIAL REPORTS: Inasmuch as the Emergency Price Control Act exempts books, magazines, motion pictures, periodicals and newspapers, and materials furnished for publication by any press association or feature service, there is no obligation on the part of businesses exclusively engaged in publishing activities to execute the report requirements with respect to Forms A and B. However, establishments specializing in job printing or combined job printing and publishing are subject to the Act when specifically requested to file reports and furnish Forms A and B to OPA.

All retailers, including book sellers, are excluded for the time being from filing corporation financial reports with OPA.

OPA PRICE REGULATION: Andrew McNally, III, has been appointed Acting Chief for the Printing and Publishing Section of OPA. Mr. McNally is located in Room 2104, Temporary Building "D".

Commercial printing in all forms not specifically excluded are understood to be subject to the limitations of the General Maximum Price Regulation.

Nothing in the General Maximum Price Regulation authorizes sales below minimum prices established under State Fair Trade Laws if these State minimums are equal to or less than ceiling prices. Also, nothing in the existing price regulations provides that goods, services, etc. may *not* be sold below price ceilings except under State Fair Trade Laws.

PAPER: Deliveries easier; no indication of any immediate curtailment of supplies of printing papers; possible transportation stringencies in fall of 1942 indicate wisdom of determining actual minimum requirements well in advance of production schedules.

PD-1A: In submitting Preference Rating Form PD-1A, only persons giving full answers to all questions and who include last date (month, day and year) on which delivery may be accepted, can be assured of having their applications considered. Incomplete data leads to delay and to rejection of otherwise justified claims for relief.

PRODUCTION REQUIREMENTS PLAN (PD-25A): Printing and Publishing firms, who, during the third quarter of 1942, will purchase or use more than $5,000 worth of basic metal must apply for priority assistance under the Production Requirements Plan before July 1.

Metals, as understood under this plan, are listed and defined in Form PD-275. They include not only copper, zinc, type metal, etc., used in the graphic arts processes but also metals acquired for use in the maintenance and repair of equipment and buildings. Metals acquired for new construction shall not be included nor the metals in finished parts, assemblies, sub-assemblies, or printing plates produced by other companies.

For the purpose of this regulation, purchase and use are practically synonymous. When a printer melts type metal and reuses it, that is not defined as use; but when he purchases a new lot of metal to replace that which has gradually been lost in the remelting process, that is use.

This Order applies only to companies who will use, during the third quarter of 1942, more than $5,000 worth of metal. Comparatively few units in the Printing and Publishing industries will be affected. The rest of the industry will not be included and *should not apply* under the PRP plan.

Copies of this form may be secured from your local WPB office *or* the Production Requirements Branch, WPB, Washington, D. C.

RUBBER: Despite conflicting statements, the rubber shortage is most acute, even if the synthetic rubber program reaches unprecedented heights, civilian relief will not be felt for at least two years. Rubber is *out* except for uses which are absolutely essential.

SLIDE FASTENERS: The Slide Fastener (Zipper) Order L-68 has been amended to release manufactured and partly-fabricated stocks of slide fasteners for use in various articles. As a result of this release, slide fasteners already in the hands of printers and publishers may be used without restriction. Zippers of plastic or silver are not restricted under the order.

SUSPENSION: The operations of a manufacturer of printing machinery have been suspended for four months for violations of Order P-100 (Repairs, Maintenance and Operating Supplies) and Order M-1-d (Aluminum Scrap).

The following quote, standard in practically all WPB orders should be noted: "*Violations.* Any person who wilfully violates any provision of this Order, or who, in connection with this Order, wilfully conceals a material fact or furnishes false information to any department or agency of the United States is guilty of a crime, and upon conviction may be punished by fine or imprisonment. In addition, any such person may be prohibited from making or obtaining further deliveries of, or from processing or using, material under priority control and may be deprived of priorities assistance."

TEXTILES: Pyroxylin-coated or impregnated materials and light-weight cotton ducks are increasingly hard to procure. It is urged that publisher plan to employ substitutes for coated and impregnated material wherever possible.

Mills are permitted to sell or deliver without restriction bag osnaburg and bag sheeting irregulars, seconds, or cuts under 40 yards in length up to 6 per cent of a mill's production of bag osnaburg and bag sheetings. Ref: L-99 amended.

TIN: Order M-43-a, as amended June 5, 1942, limits usage to 75% of use in the corresponding calendar quarter of 1940, for the following items: secondary (scrap) tin for printing plates, electro backing metal and type metal; and solder and solder foil for preparation and manufacture of printing plates.

TRANSPORTATION: ODT has appealed to industry and labor to conserve and make more efficient use of all trucks. Persons operating their own trucks should secure General Orders ODT 1 and 3 through 6. General Orders 3, 4, 5 and 6 became effective on June 1, 1942.

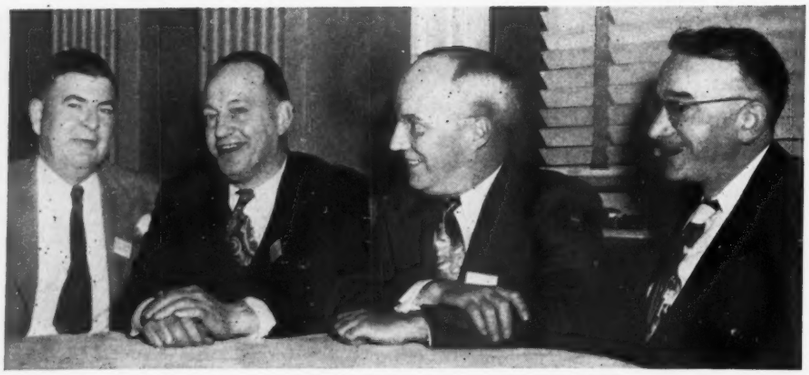
ODT release of May 29 refers to orders relaxing or extending the effective date of certain provisions of ODT Orders 4 and 5. The determination to achieve the *objectives* of the orders has been relaxed, but the changes were made to give the industries affected additional time to work out, and submit for approval, their own plans for attaining the objectives of the orders. This relates particularly to the provision for a 75 per cent return load, effective date on which has been advanced to July 1; and to newspaper deliveries, with respect to which two alternate plans for conservation of trucks were outlined in ODT No. 6, Amendment No. 1.

ODT recognizes that printers have problems of delivery peculiar to their industry, and these problems are now receiving attention. Any facts and suggestions which will lead to a satisfactory conclusion regarding such problems should be sent to: ODT, Washington, D. C. In the meantime, printers who have specific problems may file a petition for special relief setting forth that portion of the order which is considered to impose an undue hardship, and showing why the provision cannot reasonably be met and how the proposed savings can be effected in any other manner.

WRAPPING TWINE: Amendment No. 6 of Order M-84 further tightens restrictions on the use of Agave Fiber in the manufacture of wrapping twine. Inventory restrictions listed in Release T 293 continue in effect for users of wrapping twine which contains sisal or agave fiber.

ZINC: Metallic zinc was placed under complete allocation control beginning June 1. However, consumers using less than 20 tons per month are permitted to purchase directly from dealers without the necessity of applying for a certificate from WPB.

Ceiling prices for rolled zinc products are covered in Maximum Price Regulation No. 124 (PM 3096).



Group of Principal Speakers *at Iowa Newspaper Mechanical Conference, held at Des Moines, Iowa, May 24 to 26. Left to right: Fred Hudson, Newspaper Engineering Department, Intl. Printing Pressmen & Assistants' Union, Pressmen's Home, Tenn.; Asst. Supt. Val Wells, Des Moines* Register *and* Tribune; *Leon A. Link, Mechanical Consultant, Newspaper Section, Printing and Publishing Branch, WPB, and Production Manager of Cleveland* Plain Dealer; *W. W. (Bill) Warfel, Manager, Chemco Photo-Products, Chicago Office.*

Constructive Discussions

mark all meetings of the Iowa Newspaper Mechanical Conference — Group viewpoint is that there is no economy right now in etching halftones on back of used metal

By STAFF WRITER

HIGH interest in newspaper production under war conditions was in evidence at the joint meeting of the Iowa Newspaper Mechanical Conference and the Iowa Line-casting Machinists' Association. Fostered by the parent body, the machinists held a particularly worthwhile meeting on Sunday, May 24, the day immediately preceding the opening of the Iowa Mechanical Conference itself. The machinists' meeting was called to order by President Carl Bloomberg of the Des Moines *Register & Tribune.*

There were 65 machinists, mechanical executives and sales representatives present. On motion of Lou Humphrey, it was decided to hold the next meeting in Des Moines, May 16-18 in conjunction with the Iowa Mechanical Conference.

Vice President Charles H. Stout of Matrix Contrast Corporation, who is well known among many printing plant executives throughout the country is now a Lieutenant Senior Grade, USN, he having graduated from Quonset Point Naval Officers' Training School on June 12. Now is in Miami (Fla.) on temporary assignment waiting orders for ship duty.

Utmost in Paper Conservation

At the Composing Room Clinic held during the Iowa Newspaper Mechanical Conference held in Des Moines, Iowa, the latter part of May, J. W. Holden, Mechanical Superintendent of the Newton (Ia.) News, *drew chuckles from the group meeting with the statement that in his plant pages of the* Congressional Record *are being used to wrap single copies of the paper as a means of conserving waste paper.*

A sound slide film, *Type Characters*, shown by Harry Wilson of the Mergenthaler Linotype Company, and motion pictures of *Matrix Manufacture* shown by Ralph Moore of Intertype Corporation featured the opening portion of the session. In the afternoon a machinists' clinic was held in the plant of the *Register* and *Tribune*. The meeting was presided over by Bud Hourihan, machinist of the Ottumwa (Ia.) *Courier*. The Monotype division was in charge of R. J. Sanford, Job Department and Al Randall of the *Register* and *Tribune* Monotype Department.

Officers of the Iowa Line-casting Machinists' Association are: President, Carl B. Bloomburg, Des Moines; Vice President, Clarke Olney, Sioux City; Secretary-Treasurer, C. R. Hourihan, Ottumwa; Members of Executive Committee: Marion Dingman of Cedar Rapids, Cy Morse of Dubuque, Lou Humphrey of Des Moines.

Much interest was shown and many problems created by wartime shortages of material and maintenance of equipment were discussed.

Opening Session of Mechanical Conference

The opening session of the Sixteenth Annual Iowa Daily Newspaper Mechanical Conference was called to order Monday morning, May 25, by President Guy Chappell, of Iowa City, before a gathering of about 250. The address of welcome was given by Gardner Cowles Jr., publisher of the Des Moines *Register* and *Tribune*.

In welcoming the mechanical executives, Mr. Cowles urged that because of the war and the many shortages of material, all department heads should give serious attention to the conservation of materials and find substitutes wherever possible, so that the newspaper printing industry can contribute its full share to winning the war in the shortest possible time.

He stated also there is need for improvement in general makeup and press work, especially color, if the newspapers are to hold the interest of the reading public.

Leon Link, former president, one of the organizers of the Iowa conference, and now Mechanical Consultant of the Newspaper Section, Printing and Publishing Branch, WPB, also production manager of the Cleveland *Plain Dealer*, was next introduced. He urged the conservation of every item of material that goes into the making of a newspaper as an important way in which the men on the home front can back up their sons on the battlefronts.[1]

"Our sons need this material, converted into different kinds of armament, to fight for their lives and to win this war," Link continued.

"They are fighting for us. It is a part of our job to impress upon every man in the various departments the absolute necessity of making every possible saving of material and equipment so that our boys can be adequately equipped."

The speaker devoted part of his address to amendments to the war production board's order freezing sale of new and second-hand machinery.

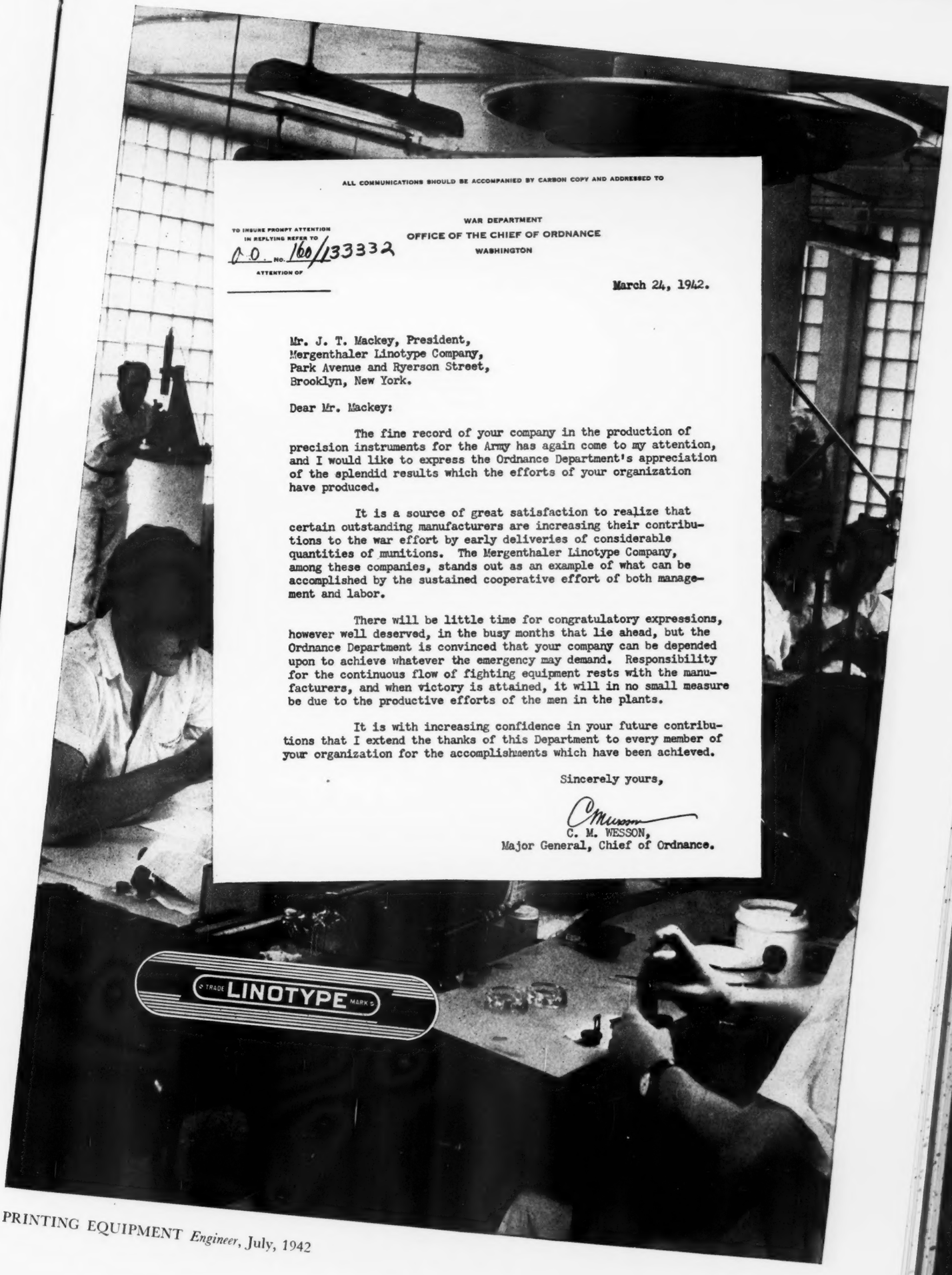
"The war production board has one job to do first and that is to conserve and provide materials necessary to winning the war," Link said.

"Wherever the war effort and industry come into conflict in obtaining materials you can be sure such materials will go to the fighting forces. Therefore, industry will fare much better if every concern will maintain the lowest minimum of supplies."

Fred Hudson of the Engineering Department, International Printing Pressmen & Assistants' Union, Pressmen's Home, Tenn., was the next speaker.[1] He spoke of the many problems confronting pressmen and stereotypers and offered

(*Continued on Page 26*)

[1] See June issue for context of talk.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TO INSURE PROMPT ATTENTION IN REPLYING REFER TO
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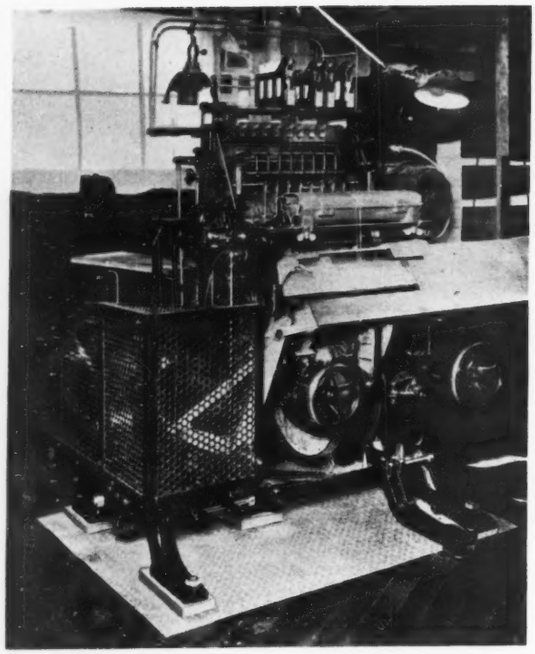
ATTENTION OF
WAR DEPARTMENT
OFFICE OF THE CHIEF OF ORDNANCE
WASHINGTON
March 24, 1942.
Mr. J. T. Mackey, President,
Mergenthaler Linotype Company,
Park Avenue and Ryerson Street,
Brooklyn, New York.
Dear Mr. Mackey:
The fine record of your company in the production of precision instruments for the Army has again come to my attention, and I would like to express the Ordnance Department's appreciation of the splendid results which the efforts of your organization have produced.
It is a source of great satisfaction to realize that certain outstanding manufacturers are increasing their contributions to the war effort by early deliveries of considerable quantities of munitions. The Mergenthaler Linotype Company, among these companies, stands out as an example of what can be accomplished by the sustained cooperative effort of both management and labor.
There will be little time for congratulatory expressions, however well deserved, in the busy months that lie ahead, but the Ordnance Department is convinced that your company can be depended upon to achieve whatever the emergency may demand. Responsibility for the continuous flow of fighting equipment rests with the manufacturers, and when victory is attained, it will in no small measure be due to the productive efforts of the men in the plants.
It is with increasing confidence in your future contributions that I extend the thanks of this Department to every member of your organization for the accomplishments which have been achieved.
Sincerely yours,
C. M. WESSON,
Major General, Chief of Ordnance.
TRADE LINOTYPE MARK



Felt Quiets Bindery Equipment—*Wool felt pads were placed under this Smyth book-sewing machine. Felt washers isolate the bolts fastening the machine to the floor, to prevent metallic contact and to check the transmission of vibration.*

Felt Is Utilized

(Continued from Page 9)

to room and floor to floor in manufacturing buildings often have an adverse effect. Proper control of vibration at its source through isolation of the individual machines, therefore, is a valuable form of plant protection.

Several of the leading manufacturers of wool felt have made extensive studies of the requirements of machine isolators and the specifications of felt for this purpose. Through long experience in this field they have developed their own methods of analysis and can recommend suitable grades for specific purposes. Wool felt—and the grades likely to be recommended for vibration isolators are 100% wool, or very high in wool content—may be cut from the sheet or roll without raveling; as soon as it has been cut to the proper size and shape it is ready for use. Ordinarily, no special treatment is required.

In the Bindery

Wool felt proves itself valuable in the bindery in various ways. Metal rollers on folding machines have a tendency to slip on paper which is heavily waxed, and finally grab and wrinkle the sheets, causing decided slowing up of production. To overcome this, the rollers may be covered in spiral form with 3/32 in. thick white felt. This has a tendency to eliminate static as well as spoilage and to cause an even and uninterrupted run. As before mentioned, other machinery can be isolated for vibration. These include shears, folders, stitchers, drills, die cutting and embossing presses. Properly selected felt mountings are effective in cushioning impact, as well as high frequency vibration, thus controlling both shock and chatter.

Stereotyping

In the stereotyping operation, felt has its uses. When a cork molder has about reached maximum service when used in the regular manner, its molding life may be extended approx. 25% by using in combination with it a 1/16 in. thick felt blanket. After approx. 100 moldings, it will be necessary to renew the felt and bring it back to original state by washing carefully in lukewarm water and mild soap. Rinse the felt thoroughly to remove the soap and hang it by clips on a wire to drain and dry.

Wool felt pads have been placed under this Challenge paper drilling machine which is used for production of loose leaf forms.

What Felt Is and Why

That which distinguishes felt from all other materials is the method of interlocking wool fibres by mechanical work, chemical action, moisture and heat to form a compact, permanent and impervious fabric having characteristics which can be produced by no other known means.

The basic process consists in laying up successive layers of fluffy carded wool "batts" in a mattress-like formation, which is steamed and ironed in a vibrating press and afterward steamed again, rolled upon itself, and beaten in a fulling mill until the mat has become shrunken, thickened and hardened to just the required consistency.

Processed in the manner outlined, wool alone becomes a three-dimensioned fabric which may have approximately the same tensile strength in all directions.

Similarly processed in association with other fibrous or filling material, felted wool retains the same characteristics and becomes the skeleton of a new structure whose properties depend upon the associated ingredients and the treatment to which they have been subjected.

Wool from sheep and lamb is the foundation for the highest grades of felt because of the unique character of the hair of the domestic species. The hair of other animals possesses somewhat similar characteristics, but to a much smaller extent.

In its natural state on the animal, wool unavoidably tangles, mats and accumulates a great amount of foreign material. When clipped and cleaned it retains the same tendency to interlace and the same ability to embrace extraneous material, and it is this characteristic of which the felter takes advantages in manufacturing a new material.

Interlocking, Self-Tightening Mechanism

When processed mechanically under the influence of heat and moisture, the kinky wool fibres are resolved into what has been aptly described as "an interlocking, self-tightening mechanism". The longer it is beaten and kneaded under the controlled conditions of the fulling operation, the tighter the embrace of the fibres and the more dense the material.

Wool alone can be felted where other fibres will not permanently unite in the same way. In combination with other fibres it becomes the framework of a permanent fabric. Impregnated with bonding agents it can be made to retain inert material, and to yield almost any physical properties that may be desired; hence its wide range of usefulness in the printing industry.

Grumman Passes On

Fred C. Grumman, 62, Assistant to President Joseph T. Mackey of Mergenthaler Linotype Co., passed away on Sunday, June 21. Surviving are his wife, Mrs. Dorothy Grumman and a son, F. William Grumman. For the last 25 years Mr. Grumman had been associated with Mergenthaler Linotype Co. During the past several years he was sales manager of the Eastern States territory.

The "STAR" Parts Factory and Main Office

IS NOW LOCATED AT

WEATHERLY, PENNA.

- In the interest of better service to our customers, The Linotype Parts Company has removed its main offices and factory to it's own modern plant at Weatherly, Penna., from which point we are now operating.
- War work—Governmental priority restrictions—hold us up here and there on an item.
- Nevertheless, every effort is being made to maintain production of replacements for our customers. That, plus a sizeable stock on hand, means customary prompt service on most items.
- Our New York Office will continue to service our trade in the New York Metropolitan area only, with the exception of emergency orders.
- Elsewhere, for prompt execution of orders, send direct to our Main Office at Weatherly, Penna.

ACE BELTS ARE STILL AVAILABLE TO OUR CUSTOMERS

Precision
TRADE ★ MARK
Parts

LINOTYPE PARTS COMPANY

WEATHERLY, PA.
(Factory and Main Office)

KANSAS CITY
314 West 10th St.

NEW YORK	203 Lafayette St.
CHICAGO	318 W. Randolph St.
MINNEAPOLIS	503 Fourth Ave., South
DENVER	1441 Blake St.

ZINK CUT CEMENT PRICES in the United States: 75c per large tube; $6.00 per dozen tubes; $5.00 per dozen tubes in gross lots.

UNNECESSARY PRODUCTION WORRIES

can be eliminated by providing your force with the means for getting rid of them automatically. For instance, the trouble caused by misplaced, lost or incorrectly positioned cuts can be gotten rid of by using

Booth's Zink Cut Cement

This cement fastens all kinds of cuts to wood or metal base. Never deteriorates. Positively does not deform printing surfaces of cuts.

Booth's Black Rubber Rolls

are made according to the pet wishes of line-composing machinists. They fit the shaft snugly and when applied properly are truly concentric from end to end. Their keyboard cam turning qualities are known throughout the United States. Try them.

In addition to the A-10 Rating Under Preference Rating Order P-100 for Repair, Maintenance and Operating Supplies on your purchase orders for our products, also please add the symbol DP-17.10 to conform with WPB'S Priorities Regulation No. 10.

THE E. A. BOOTH RUBBER COMPANY

364 ROCKEFELLER BUILDING • CLEVELAND, OHIO

Constructive Discussions

(Continued from Page 22)

suggestions to overcome many of the shortages. He stressed that due to world conditions it is the patriotic duty of all to conserve the materials now available and emphasized particularly the care and maintenance of present equipment.

The morning session closed with an address by W. W. Warfel, Chemco Photo-Products company, Chicago, Ill.

Composing Room

Tuesday afternoon was given over to group sessions. An interesting and educational feature of the composing room session was the showing of pictures entitled *A Partial History of Early Typesetting Machines*, by Vernon G. Eck of Dunwoody Institute, Minneapolis, Minn. Mr. Eck showed slides of more than thirty typesetting machines produced since 1822, with a description of each.

Harry T. Murphy, Composing Room Superintendent of the Des Moines *Register & Tribune*, spoke on *Maintaining Good Will Attitude of Employees in the Composing Room.*

Costs—What We Are Doing to Keep Production Up to High Standard Through Present Wartime Emergency, was covered capably by Arthur Schmeichel of the Muscatine (Ia.) *Journal.*

Then followed a round table discussion on practices to help conserve materials. It was brought out that all present were war conscious and were saving many materials which formerly were discarded. All were keeping a close check on lost and damaged matrices. In most plants executives have been able to cut down the waste of strip and spacing material.

Pressmen and Stereotypers

In the pressmen's and stereotypers' group session the maintenance of equipment was discussed. An interesting discussion took place relative to syndicate mats put out by food and drug stores. Much complaint was voiced as to the shallowness of stereotype mats and carelessness in placing cuts. It was pointed out that it was impossible to print clean advertisements from mats of this kind. It was urged that anyone producing advertising mats should furnish as deep a mat as possible.

The Engravers

The engravers' group meeting viewed a movie film illustrating the Chromolite Hi-Lite process, shown through the courtesy of the Chemco Photo-Products company.

A lengthy discussion followed pertaining to those items now scarce due to the war effort. Shellac, zinc, copper, rubber cement, and chemicals were all considered. One bright spot was mentioned—substitutes for shellac are being developed which probably will serve the purpose if shellac is frozen so far as cold top enamel is concerned.

It was the view of this group that there was no economy at this time in attempting to etch halftones on the back of used metal. The added labor and materials make prohibitive the etching of small flats on scrap material.

An interesting exhibit was presented of printing plates made in seven different shops from the same photos. These were inspected in regard to depth, dot structure and tone. At a later date proofs will be made on a newspaper press.

Ken Waughtal of the Kayenay Engraving Co., Mason City, Iowa, was elected chairman for the 1943 group session.

Officers Elected

Tuesday morning's session was called to order at 10 o'clock. Reports of group chairmen were given. Des Moines was again selected for next year's conference, the dates being May 16, 17 and 18. Charles (Tod) Bleuer, Davenport *Democrat*, was elected president; Val Wells, Des Moines, first vice president; Andy Joyce, Des Moines, second vice president and chairman of the entertainment committee. Paul Kamler, Clinton, Iowa, was re-elected secretary-treasurer.

How to select the best ROUTING CUTTER

All Royle Routing Cutters reflect advantages gained through more than eighty years in making these tools. Royle offers a complete line of cutters, of sound design, fine materials, and expert workmanship. ***Order direct or through your dealer . . Be sure it's a Royle.*** **Write for catalog 425.**

Choose Style According to Use

Styles	*Blade Sections*	*Recommended for*
A		Electrotypes, stereotypes, wood
B		Zinc
C		Brass
D		Electrotypes and copper
E		Copper (Steel at reduced speed)
F		Zinc (Reinforced blade)
G		Brass (Reinforced blade)
H		Copper (Ground below center)
L		Zinc (Long blade)
M		Wood veining (No taper)

JOHN ROYLE & SONS 8 Essex Street, Paterson, N. J.

PRINTING PATENTS REPORT

Covering Patents Issued May 26, June 2, June 9, June 16, June 23

This data is compiled exclusively for *Printing Equipment Engineer* by Invention, Inc., is verified in the United States Patent Office, and is comprehensive of all patents in the field of each heading for the dates specified.

For copies of patents listed here, specify the patent numbers and send 10c each (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

Composing Room Equipment:

2,285,206. KEYBOARD MONOTYPE COMPOSING MACHINE which is an improvement upon the monotype machine in its present commercial form (original patent No. 944,405). Among the objects of the invention are the provision of improved controller strip guiding and perforating mechanism; a motor means for operating a variable number of punches with evenness at light touch of the operator's fingers upon the keys; an improved paper feed mechanism and for the disposal of nibs produced by the operation of perforating; and provision for the proper and at times delayed action of the several parts of the mechanism by means of relay and other types of valves in the pneumatic system; and for other improvements in the mechanism. Invented by Mauritz C. Indahl, Rydal, Pa. Assigned to Lanston Monotype Machine Co., Philadelphia, Pa. Application September 14, 1940. 21 claims.

2,285,897. ACUTE ANGLE GAUGE FOR SAW TABLES such as are employed in printing shops where filler bars are employed and where these bars must be cut to some particular angle so that when the type is clamped in a frame, a particular portion of the type will be held at an angle to conform to that cut on the filler bar. The gauge is useful, for instance, in setting newspaper advertising where it is desired to emphasize some certain copy with type set at an angle. The attachment comprises a support detachably secured to the work conveyor of a cutting machine at various selected distances from the plane of cutting, and an arm swingable upon the support about an axis located near the plane of cutting. Means carried by the arm are provided for clamping the work in adjusted position. Invented by Walter E. Campbell, Wichita, Kans. Unassigned. Application March 31, 1938. 13 claims.

Feeding, Folding, Delivery:

2,284,318. SUPPORT FOR CHANGING THE DIRECTION OF TRAVELING WEBS which utilizes the same means throughout for adjustment of the web-travel to various angular positions relative to the longitudinal axis of the web, and which thus obviates undue complication. The apparatus comprises longitudinal bars between the printing cylinders and the folding means, a pair of web guide bars spaceable at optional distances from each other along the longitudinal bars, and means for setting the web guide bars at any desired distance apart from each other and at desired angles relative to either longitudinal bar. Two slides on each of the longitudinal bars have set screws for locking in desired position on the bars. The slides have heads swiveled on them, also with set screws, for holding the web guide bars which extend slidably at each end through the heads. Invented by Walter E. Hamlin, Cleveland, Ohio. Assigned to The Cleveland Shopping News Co., Cleveland, Ohio. Application November 15, 1939. 1 claim.

2,284,429. SHEET FEEDING MECHANISM, primarily for lithographic or offset type presses, which is adapted to transport a large number of sheets to the impression cylinder in a short space of time, but which does not require rapid movement of the sheets en route from stack to cylinder. The sheet feeder includes friction and hold-down means for buckling the two rear corners of the top-most sheet on a stack, suction means to lift top sheet where buckled, thereby raising entire rear edge of top sheet, and an air-blast means acting to float top sheet as advanced by suction means. Improved efficiency and positive action is said to be accomplished. Invented by Joseph F. Jirousek, Cleveland, Ohio. Assigned to The Chandler & Price Co., Cleveland, Ohio. Application October 13, 1939. 6 claims.

2,284,430. SHEET FEEDING MECHANISM for offset or lithographic presses whereby the sheets are forwarded in lapped relation. The feeder is designed to separate and advance a large number of sheets in a short time without too rapid movement of the sheets en route from the stack to the impression cylinder. An air-blast at the rear and forward edges of a stack assists in separating the top-most sheet from the next subjacent sheet of the stack initially. The forward edge of this top sheet is still overlaid by the preceding sheet in process of being forwarded and the rear edge of the top sheet is confined by a hold-down mechanism. The rear portion of this top sheet is then abruptly elevated by a suction mechanism, the blowing is discontinued and the sheet is advanced by the suction action in underlapped relationship to the preceding sheet. Invented by Joseph F. Jirousek, Cleveland, Ohio. Assigned to The Chandler & Price Co., Cleveland, Ohio. Application November 30, 1940. 12 claims.

2,285,076. MEANS FOR FEEDING SHEETS to printing machines which comprises a conveyor which is characterized by means for gripping the sheets and slowing down the movement of the sheets as they approach the front steps without a corresponding reduction in the speed of the conveyor. The gripping means is arranged to release the sheets when they strike the stops or immediately before so that the sheets, which strike the stops at less than full conveying speed, are thereafter free to be front and side registered and are pressed up to the stops by the conveyor operating at its full speed. Invented by Headley Townsend Backhouse, London, England. Unassigned. Application August 1, 1940. 8 claims.

2,285,488. WEB ROLL FEEDING MECHANISM having an improved magazine reel in which the side lay of the web fed from the web rolls may be varied accurately, rapidly and with a minimum of power, by means of a fluid motor arrangement. A number of web rolls are supported by means of a pair of plural armed members mounted on a reel shaft which is rotatably supported and axially movable in a pair of real supports. Mounted on one of the supports and connected to the reel shaft so that the shaft is free to turn is a fluid pressure motor, such as a piston and a hydraulic cylinder, coaxial with the shaft and supplied with liquid under pressure by a small high speed reversible electric motor-driven pump, mounted on the support just below the cylinder. The pump and cylinder are so interconnected that liquid is supplied to one end of the cylinder and is returned to the pump from the other end of the cylinder, while, when the motor is reversed, the direction of liquid flow is reversed. Invented by David B. Bernard, Chicago, Ill. Assigned to The Goss Printing Press Co., Chicago, Ill. Application July 14, 1939. 6 claims.

2,287,140. IMPROVED SHEET CALIPERING MECHANISM FOR STREAM FEEDERS which is especially constructed for measuring stream thickness and which effects stopping of the feeder or removes the excess sheets in the event that excess sheets are present in the stream. The sheet calipering operation is performed on the marginal side edges of the lapped sheets and may be performed at either side of the stream of sheets through the provision of duplicate sheet calipering mechanisms arranged at

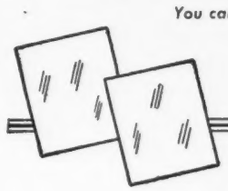
A fine metal for fine screen halftones

Engravers "in-the-know" have been using A-Z Alloy for years in cases where fine screen work on a zinc alloy has been required.

The fine texture of A-Z Alloy, its combination of toughness with smooth, quick etching, its unusual registering qualities, and its ability to stand heat have long been recognized.

Expert engravers know that a zinc alloy cannot produce as fine a cut as copper, but if copper becomes scarce, A-Z Alloy will do a swell job of pinch-hitting and at a price no higher than its well-known team mate, Zomo Electric Zinc.

You can order A-Z Alloy and Zomo Electric Zinc, plain or Backoted, from leading metal suppliers.



ZOMO ELECTRIC ZINC

A-Z ELECTRIC ALLOY

opposite sides of the feeder. Invented by Walter E. Schneider, Leo C. Williams, and Edward J. Yeo, Pearl River, N. Y. Assigned to Dexter Folder Co., Pearl River, N. Y. Application March 26, 1941. 20 claims.

Miscellaneous:

2,284,127. NEW ESTERS OF POLYGLYCEROL, obtained by reacting polyglycerol with a substantial proportion of a monobasic acid, not of the drying type or of a cycloaliphatic acid together with a lesser proportion of a resin-forming dicarboxylic acid. Products are useful in dispersing dyes and pigments for use in printing inks. Invented by Herman A. Bruson, Philadelphia, Pa. Assigned to Roehm & Haas Co., Philadelphia, Pa. Application June 7, 1940. 5 claims.

2,284,241. CORROSION INHIBITING MATERIAL for coating the surfaces of ferrous metals to retard formation of rust and which will not decrease the receptivity of the metallic surface for lithographic inks, paints, lacquers and the like. Composition contains an acyclic aliphatic radical containing at least 6 carbon atoms and preferably long chains from about 8-18 carbon atoms. Invented by James H. Wernts, Wilmington, Del. Assigned to E. I. du Pont de Nemours & Co., Wilmington, Del. Application May 13, 1939. 15 claims.

284,276. QUICK DRYING INTAGLIO INK based on the discovery that acceptable intaglio prints may be obtained from inks having alkali silicate vehicles by incorporating into the composition a small amount of paratoluidine. Example: Carbon Black—3.0 parts (by weight); powdered Paratoluidine—1.0 part; Potassium Silicate solution (27% solids)—SiO_2 to K_2O ratio 3.9 to 1.0—96.0 parts. The ingredients are mixed and passed through a colloid mill. The paratoluidine not only converts the previously mottling ink into one free of mottle, but it also intensifies the color of the black, giving it a bluer tone. Invented by David M. Gans, Bronx, N. Y. Assigned to Interchemical Corp., New York, N. Y. Application June 22, 1939. 6 claims.

2,284,277. QUICK DRYING INTAGLIO INK ADAPTED TO PRODUCE HIGH GLOSS PRINTS, comprising a dispersion of pigment in an alkali silicate solution, the alkali silicate containing from 3.4 to about 3.9 mols of silica per mol of alkali oxide and the solids content of the silicate ranging from between 30 to 42% for the 3.4 to 1 silica/alkali ratio to between 24 and 34% for the 3.9 to 1 silica/alkali ratio. Invented by Albert E. Gessler and David M. Gans, New York and Paul W. Greubel, Long Island City, N. Y. Assigned to Interchemical Corp., New York, N. Y. Application June 22, 1939. 4 claims.

2,284,279. QUICK DRYING INTAGLIO INK ADAPTED TO PRODUCE GLOSSY PRINTS OF METALLIC APPEARANCE, based on the discovery that noticeably improved leafing can be obtained with bronzes in aqueous solution mediums by using as the medium an aqueous solution of an alkali silicate in which the ratio of Sio_2 to alkali oxide is 3.4 to 1.0 or higher, provided that the silicate content of the medium is within 12% of the content at which gelation occurs. Invented by Paul W. Greubel, Long Island City, N. Y. Assigned to Interchemical Corp., New York, N. Y. Application June 22, 1939. 4 claims.

2,284,387. PROCESS OF TREATING MECHANICAL FABRICS, such as are used in the printing art (Palmer blankets) made entirely or in part of wool, to increase their resistance to stretching and disintegration under attack by alkalis or alkaline solutions. Process consists in treating the fabric in an acid solution of an alkali chromate for a long enough time to develop a dark brown color. Thereafter the solution is discarded, the wool rinsed in clear water and then treated with a chemical solution which will reduce the chrome at least in part, to chromium oxide. Invented by Carlton C. Gordon, Elsmere, N. Y. Assigned to Albany Felt Co., Albany, N. Y. Application December 1, 1939. 6 claims.

2,285,183. METHOD OF SETTING A FILM OF TYPOGRAPHIC PRINTING INKS containing prolamines, by treating the ink film with water whereby the water mixes with the solvent of the ink and the prolamine immediately forms an irreversible gel or precipitate. Typical ink which may be used: Parts are by weight. Varnish—53; titanium dioxide—28; phthalocyanine blue—1.70; blue toner—5.70; alkali blue—0.90; lecithin—1.80; diethylene glycol—8.90. The varnish is composed of: phenol aldehyde resin—4 parts; zein—20; diethylene glycol—76. Invented by Dominic J. Bernardi, Astoria, N. Y. Assigned to Interchemical Corp., New York, N. Y. Application November 1, 1940. 4 claims.

2,285,417. NEW COUMARONE-INDENE RESINS, useful in the manufacture of newsprint ink, based on the discovery that the complete resin recovered from purified aromatic still residue which is a waste product of coal by-product recovery plants, may be used as plasticizer with a very high polymer coumarone-indene resin to give a blend with a melting point approximately as high as 95 deg. C. The blend is suitable for use in binders for mastic tile, wire coaters, and among other uses, newsprint ink. Invented by Frank W. Corkery, Crafton, Pa. Assigned to Pennsylvania Industrial Chemical Corp., a corporation of Pennsylvania. Application June 8, 1939. 9 claims.

2,285,430. LITHOGRAPHIC INK which permits the speeding up of lithographic processes and makes possible for the first time litho web printing on non-absorbent metal such as tin plate. The ink comprises a water repellant natural or synthetic resin dissolved in a volatilizing solvent consisting of paraffin hydrocarbons free from unsaturated and aromatic constituents. By using a small furnace heated from 1000 to 2000 deg. F., the time of heating for the ink is reduced from 20-30 minutes to two or three seconds and the sheet metal may be run through press and furnace in web form. Example for red ink: barium lithol toner—35 parts; ester gum—39.0 parts; peanut oil (plasticizer for tin forming)—7.8 parts; paraffin hydrocarbons (B.P. 263-297 deg. C.)—18.2 parts. Invented by Albert E. Gessler, New York, N. Y., Everett F. Carman, Dumont, N. J. and Louis F. Englehart, Rockville Center, N. Y. Assigned to Interchemical Corp., New York, N. Y. Application June 30, 1937. 4 claims.

2,286,017. SELECTIVE REMOVAL OF CADMIUM from white metal scrap such as type metal, by the addition of sulfur to the molten metal from which the cadmium is to be removed. In carrying out this process, the alloy to be treated is melted and sulfur stirred in at a fairly low temperature. After the introduction of the sulfur, the temperature of the molten metal is raised, while stirring, to about 500 deg. C. A pasty dross is then formed which is skimmed off and dried in any known manner. The cadmium sulfide contained in the dross will represent substantially all of the cadmium originally present in the white metal alloy treated. Invented by Carleton H. Smith, Montreal, Canada. Assigned to National Lead Co., New York, N. Y. Application February 26, 1941. 5 claims.

2,287,116. METHOD OF INCORPORATING DRYING METALS such as lead, cobalt, iron, etc. in printing inks by preparing a water-insoluble organic hydroxy salt of the drying metal and reacting it with the ink at high temperatures, whereby the hydroxy metal salt is rendered soluble and enters into solution in the vehicle. These salts are said to have improved solubility and stability in the vehicles. Example of the method of preparing an hydroxy cobalt salt (23% cobalt metal content) 2800 lbs. of water are introduced into a tank equipped with an agitator. 100 lbs. of caustic soda and 225 lbs. of naphthenic acid (no. 240) is added and agitated. While agitation continues, a solution of 331 lbs. of cobalt sulfate crystals in 400 lbs. of water is added. When the action is complete, the salt solution is decanted, filtered and dried. Invented by Arthur

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Minich, Elizabeth, N. J. Assigned to Nuodex Products Co., Elizabeth, N. J. Application March 26, 1940. 4 claims.

2,287,484. ETHYL CELLULOSE BASE COATING COMPOSITION which is useful in waterproofing and protecting inks, giving them a high gloss. For this purpose, its applications include use on magazine covers, book jackets, posters, and the like, in addition to other applications such as for dope for airplane fabric. Example of composition: Ethyl cellulose (44.5% ethoxyl—viscosity 45-50 seconds)—10.3 parts by weight; Tricresyl phosphate—1.5 parts; Ethanol—36.7 parts; Toluol—44.1 parts; Xylol—7.4 parts. Invented by Louis Pereny, Homewood, and George A. Meisinger, Chicago, Ill. Assigned to Sherwin-Williams Co., Cleveland, Ohio. Application May 8, 1939. 4 claims.

Plate Making:

2,285,060. FLEXIBLE PRINTING PLATE (such as is described in patent No. 2,189,682 by the same inventor), for rotary printing presses, having the added advantage of low manufacturing cost. One of the objects of the invention is to provide a plate in which makeready may be easily and permanently incorporated away from the printing mechanism and, therefor, without requiring enforced idleness of the mechanism during the makeready application. The plate is particularly useful where exact register is necessary such as in multicolor work. Invented by Julius Schmutz, Louisville, Ky. Assigned to Schmutz Manufacturing Co., Louisville, Ky. Application March 16, 1940. 9 claims.

2,285,116. THIN, FLEXIBLE SHEET METAL PRINTING PLATE having an intermediate portion providing a printing surface and two end portions extending at acute angles to the printing surface, the end portions having sharp angular edges at the junctures of the intermediate portion so as to permit flush joining when wrapped around a cylinder. The plate may be used in either letterpress or planographic printing but is said to be of particular advantage in rotogravure printing, especially when the material printed upon is in web form, because the close, tight joint at the meeting of the ends of the plate on the cylinder leaves a crack which is so small that it does not gather ink and transfer it to the printed web. Invented by William F. Grupe, Lyndhurst, N. J. Assigned by mesne assignments to Interchemical Corporation, New York, N. Y. Application October 12, 1938. 16 claims.

2,285,680. MACHINE FOR AUTOMATICALLY CASTING AND FINISHING STEREOTYPE PLATES, which performs the operations of casting the plate in a mold, removing it, finishing it by successively shaving excess metal from the inner concave surface, trimming off the tail and delivering the plate in a cooled condition. These steps are powered from a single motor. A control mechanism is provided by which the several operations are carried out in timed sequence. Invented by Oscar C. Roesen, Scarsdale, N. Y. Assigned to Wood Newspaper Machinery Corp., Plainfield, N. J. Application December 26, 1940. 15 claims.

2,286,220. MOLDABLE COMPOSITION FOR FORMING PRINTING PLATES, comprising cellulose acetate materials of different viscosity, a minor proportion of a plasticizer and a volatile solvent. Typical composition (by weight) ½ second cellulose nitrate—15%; 40 second cellulose nitrate—5%; Triphenyl phosphate—5%; Amyl acetate—43.5%; Butyl acetate—31.5%. The material forms a printing plate which will take a sharp and clear impression of surfaces such as copy reliefs when the composition is pressed into contact therewith and allowed to harden and set. The material will not adhere to a dampened or water swollen gelatin copy relief. Invented by Ralph H. McKee, New York, N. Y. Unassigned. Application March 4, 1938. 14 claims.

2,287,187. MACHINE FOR PLANING METAL SHEETS of zinc, copper, etc. such as are used for photoengraving plates to produce semi-finished or finished plates having a highly uniform thickness over their entire area. Invention provides improvements over patent No. 2,216,538 in that adjustments of the diamond cutting tools may be effected with respect to the carriage surface and a new mounting for the carriage on the machine bed is provided to avoid rocking movement or other instability of the carriage. Invented by Thomas Jerome Masse, Alexandria, Australia. Assigned to The Edes Manufacturing Co., Plymouth, Mass. Application July 28, 1939; in Australia March 30, 1939. 21 claims.

2,287,228. VACUUM PRINTING FRAME of the type employed for photographically printing upon a sensitized plate from a suitable negative held in close contact thereto by maintaining the frames in proper air tight juxtaposition, and utilizing an exterior light source for the printing operation. The new frame eliminates the need for clamping means. It is constructed so that either the glass or the blanket frame may be raised and lowered and both frames may be rotated through arcs of 360 degrees. In the production of photolithographic albumen and deep etch plates, elevation of the glass and absence of clamps permits easy and convenient working from either side of the frame, enabling accurate positioning of images required in set-ins, double printing and color work. Invented by James T. Campbell, Highland Park, Mich. Unassigned. Application January 24, 1941. 19 claims.

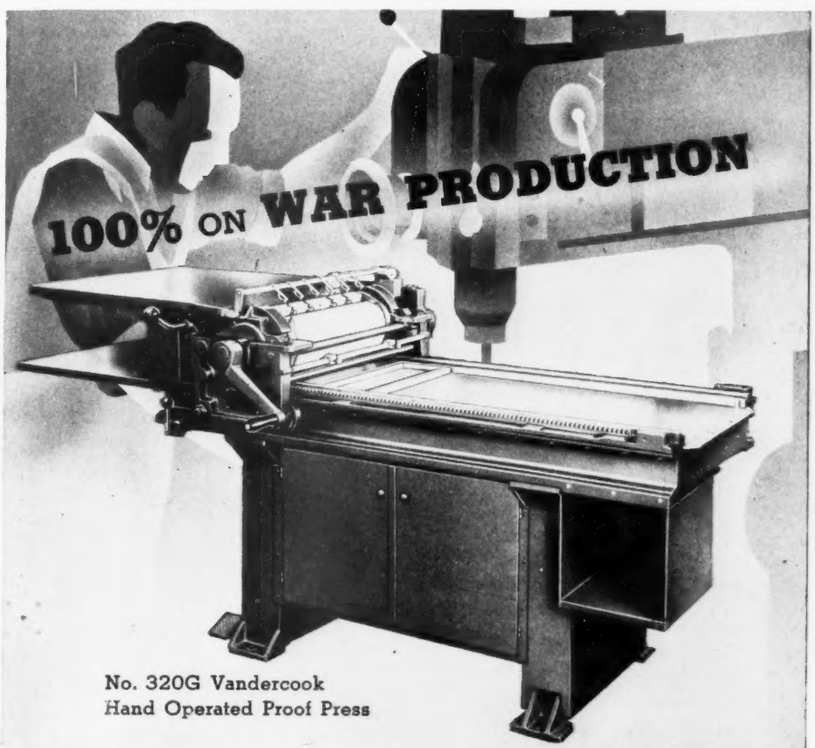
2,287,271. PROCESS CAMERA of the type used for copying or for making halftone or line negatives in the photoengraving art, provided with a novel mechanism for supporting a severed portion of a strip of film in the focal plane of the camera without the use of a plate of glass interposed between the film and the lens of the camera. Invented by Frank T. Powers, Glen Cove, New York. Unassigned. Application January 25, 1940. 19 claims.

Printing Presses and Equipment:

2,283,969. APPARATUS FOR SPRAYING AN OFFSET-PREVENTING LIQUID on to freshly printed sheets, the apparatus being of the type in which a piston, moved by means of compressed air and arranged in a separate chamber, acts by means of a lever upon a nozzle needle and imparts a movement to the needle which opens the nozzle. Invention provides that the compressed air required for the spraying operation is led into a chamber which accommodates only the piston and into which there opens a duct controlled by the piston and leading to the spraying nozzle. The compressed air passes directly to the spraying nozzle through this duct. This construction enables the spraying of an accurately measured quantity of liquid onto the sheet and prevents formation of liquid drops on the nozzle which would spot the printed sheet. Invented by Artur Buttner, Heidelberg, Germany. Assigned to Schnellpressenfabrik A. G., Heidelberg, Germany. Application February 27, 1939; In Germany March 3, 1938. 5 claims.

2,284,852. HYDRAULIC DRIVE FOR MACHINES such as rotary printing presses, which will drive the press at low speed for threading the web and at a high speed for printing. The drive permits gradually accelerating and decelerating the press between high and low speed to avoid breaking of the web. A hydraulic motor for driving the press is energized by liquid supplied from a pump having a member which is shiftable between two positions to cause the pump to deliver liquid at one of two rates, thereby causing the motor to drive the press at one or the other of two speeds. Means are provided for limiting the rate at which pump delivery is varied, thereby gradually varying the speed of the machine from one speed to another. Invented by Ransom Tyler, Greenfield, Wis. Assigned to The Oilgear Co., Milwaukee, Wis. Application June 23, 1938. 9 claims.

2,285,052. SPEED-VARIABLE FOUNTAIN INK SUPPLY for regulating the distributicn of ink in roller cylinder printing presses employing the ductor roll type of ink motion. Invention provides for adjusting the frequency of transfer of ink by a ductor roll from a fountain roll to a lower ink drum to compensate for irregularity of feed due to speed and to maintain a uniform transfer of ink to the ink drum. For this purpose a variable speed transmission set has been interposed in the train of gearing running from the lower ink drum to the fountain roll and thus indirectly to the duct roll. In this way, it is possible to vary the functioning of the ductor roll with respect to the lower ink drum. This will insure that the latter at all times and regardless of speed of the printing press will transfer a uniform amcunt of ink. Invented by Oscar C. Roesen, Scarsdale, N. Y. Assigned to Wood Newspaper Machinery Corp., Plainfield, N. J. Application July 11, 1941. 15 claims.



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2,285,763. IMPROVED PRINTER'S BLANKET, characterized by low cost construction, thinness and equalized printing pressures regardless of non-uniformity in the surface of the printing plate. The blanket comprises an outer lamination of a smooth hard fiberless cellulosic sheet such as cellophane, 3 to 5 thousandths of an inch thick and an under lamination of synthetic rubber made of chloroprene or polymerized vinyl halides, about 4 to 7 thousandths of an inch thick. Invented by Gustav A. Vasel, Philadelphia, Pa. Unassigned. Application December 16, 1939. 3 claims.

2,286,032. SHEET REGISTERING MEANS adapted for use with the sheet receiving cylinder of a printing press. Device includes an adjustable sheet engaging member on, or series of such members spaced apart axially along, a sheet receiving cylinder whereby sheets being delivered thereto may be slightly stretched, contracted or otherwise disposed on the cylinder to so register them as to compensate for certain irregularities in either the printing plates, or in the paper. Mechanism also includes means to move sheet engaging members out of engagement with the sheet edge after a sheet has been placed in register and grippers have engaged it, preparatory to carrying the sheet from the receiving cylinder into the machine or toward another printing unit. Invented by William K. Eckhard, Newark, N. J. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application February 11, 1941. 18 claims.

2,286,731. DRYING APPARATUS USING HEATED AIR for drying printings or coating on web material such as paper, cloth, etc. Invention utilizes a compact dryer providing an air heater and a centrifugal fan for moving air, both housed in a single insulating casing which also houses drying nozzles and recirculated-air passages. This design of dryer is particularly suitable for use with small web printing machines, the space required being much less than required by previous dryers having fans and heaters mounted on the exterior of the dryer casing. Invented by Milton E. Hanson, Haddenfield, N. J. Assigned to B. F. Sturtevant Co., Boston, Mass. Application February 2, 1940. 2 claims.

For Patent Research in the U. S. Patent Office, or a prompt estimate on any type of search, address INVENTION, INC., Barrister Bldg., Washington, D. C.

SNPA (Eastern Div.) Mechanical Committee

In the June issue of *Printing Equipment Engineer* it was stated erroneously that Claude Baker, Composing Room Superintendent of the New Orleans *Times-Picayune* and *States* is chairman of the SNPA Eastern Div. Mechanical Committee. Composing Room Superintendent C. Frank Mann of the Louisville *Courier-Journal* and *Times*, is now the chairman, he having been selected to serve for the 1942 period. Mr. Mann succeeded Mr. Baker, the former chairman. The latter, however, is chairman of the Committee on Arrangements for the next Eastern Division SNPA Mechanical Conference.

Other members of the Mechanical Committee headed by Mr. Mann are: E. O. Aslinger, Production Manager of the Greensboro (N.C.) *News-Record;* W. B. Astor, jr., Stereotype Superintendent of the Memphis (Tenn.) *Commercial-Appeal;* H. R. Capps, Chief Machinist, Jacksonville (Fla.) *Times-Union;* Henry M. Duke, Mechanical Superintendent, Charleston (S.C.) *Post-Courier;* I. J. Gardner, jr., Composing Room Foreman, Chattanooga (Tenn.) *Times;* T. C. McLemore, Superintendent, Mobile (Ala.) *Press-Register;* E. A. Van Norden, Pressroom Superintendent, Atlanta (Ga.) *Journal;* Harry Wilson, Stereotype Superintendent, Birmingham (Ala.) *News* and *Age-Herald;* Walter C. Johnson, Secretary-Manager and Tom Tanner, Labor Commissioner, both of the SNPA.

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EQUIPMENT

SALES

Recent Linotype Installations

Eight Linotypes have been added by Poughkeepsie Newspapers, Inc., Poughkeepsie, N. Y. The Canton (Ohio) *Repository* has installed three machines. Three Linotypes have been added by the Chilton Company, Philadelphia. One or more Linotypes have been installed by the Kalmbach Publishing Company, Milwaukee; Riverside Press, Cambridge, Mass.; Murfreesboro (N.C.) *News;* School Sisters of St. Francis, Milwaukee; Wal-Min Press, Inc., New York, N. Y.; Fowler (Mich.) *Post;* Plainfield (N.J.) *Courier-News;* Cumberland (Md.) *News* and the *Times;* Sussman Print Shop, Detroit; *Daily Town Talk*, Alexandria, La.; Pasca-

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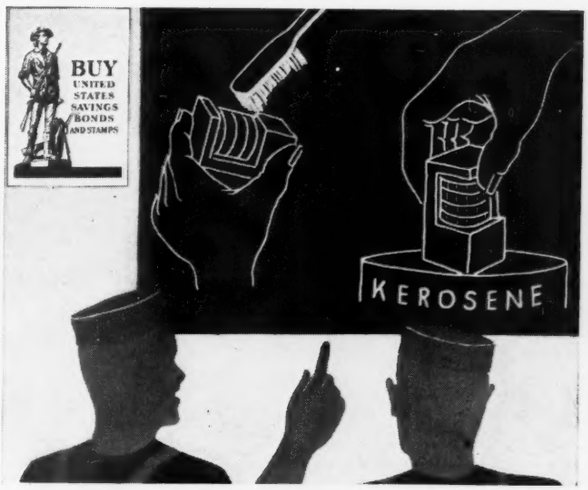

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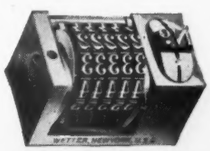

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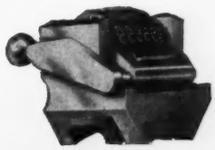

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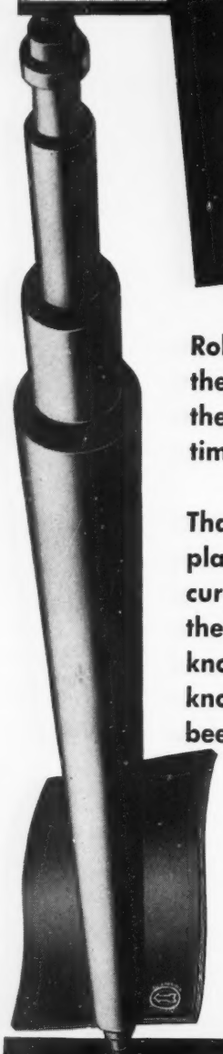

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One or more Linotypes have been installed by the Burlington (Vt.) *Free Press;* War Department, Jeffersonville, Ind.; Dun & Bradstreet, Inc., Brooklyn, N. Y.; Billings (Mont.) *Gazette;* William J. Atwill, Buffalo, N. Y.; Lebanon (Pa.) *News;* Duncan (Okla.) *Daily Banner;* War Department, Fort Belvoir, Va.; Hercules Powder Company, Wilmington, Del.; Diamond Printing Company, Wilmington, Del.; Little Rock (Ark.) *Gazette;* Waco (Texas) *News-Tribune* and the *Times-Herald;* Allentown (Pa.) *Call* and the *Chronicle; American Freeman,* Girard, Kan.

Technical Literature

(Continued from Page 20)

furnishings, women's apparel, swim suits, men's apparel, automobiles, plastics and holiday novelties. Color preferences among manufacturers as indicated by consumer acceptance are indicated in percentages for each color. Copies of the booklet may be obtained from Eagle Printing Ink Co., 100 Sixth Ave., New York, N. Y.

The Eagle Printing Ink Co. also is inaugurating another phase of its continuing study by means of a visual exhibition of the actual colors and materials which entered into this report. After being shown in New York, it will be available as a traveling exhibit to any club or organization in the U. S.

Your Intertype in Wartime

"Your Intertype in Wartime" is the title of a new 24-page booklet just issued by Intertype Corporation. This booklet gives complete information on the care and maintenance of

all Intertype models, and a chapter is devoted to the care of matrices. It will be sent free upon request to Intertype Corporation, 360 Furman Street, Brooklyn, or any of its branch offices.

Screened Type in Newspaper Printing

A booklet entitled *Don't Screen Type!"* has been published by Mergenthaler Linotype Co. for distribution among retail advertisers and newspaper mechanical executives. Six comparative exhibits showing black on white newsprint with the same type matter shown in screened backgrounds of various values, plus several text pages showing why screened backgrounds should not be employed in newspaper display advertising are given in the booklet. These specimens show how body type loses readability when covered by screen backgrounds.

Advertising production in newspapers has been handicapped for years by the advertisers' demands for screens over type matter. Costs have been unwarrantably increased, and time factors in production made acutely difficult. The demonstration of the loss of legibility with screened types is too significant to warrant the continuation of such practices. The wartime saving of zinc on such plates is shown to have practical as well as patriotic virtues.

Losses of readability up to 38% become a potent argument against the screening of type. The booklet is being sent to specially selected lists of retail advertisers and will be sent on request to any interested inquirer by Mergenthaler Linotype Co. or any of its agencies.

Keep the Light Burning

To _____

BUY WAR BONDS AND STAMPS

NAME AND ADDRESS PRINTED HERE

UNCLE SAM DELIVERS THE GOODS

— SO DO WE —

To _____

NAME AND ADDRESS PRINTED HERE

USE YOUR CAPITAL

BUY WAR BONDS AND STAMPS

To _____

NAME AND ADDRESS PRINTED HERE

THE SPIRIT OF '76 PREVAILS TODAY

BUY WAR BONDS AND STAMPS

To _____

NAME AND ADDRESS PRINTED HERE

LET Freedom RING

BUY WAR BONDS AND STAMPS

To _____

NAME AND ADDRESS PRINTED HERE

FOR VICTORY
LIBERTY AND HONOR

BUY WAR BONDS AND STAMPS

To _____

NAME AND ADDRESS PRINTED HERE

PRESERVE OUR UNION

BUY WAR BONDS AND STAMPS

To _____

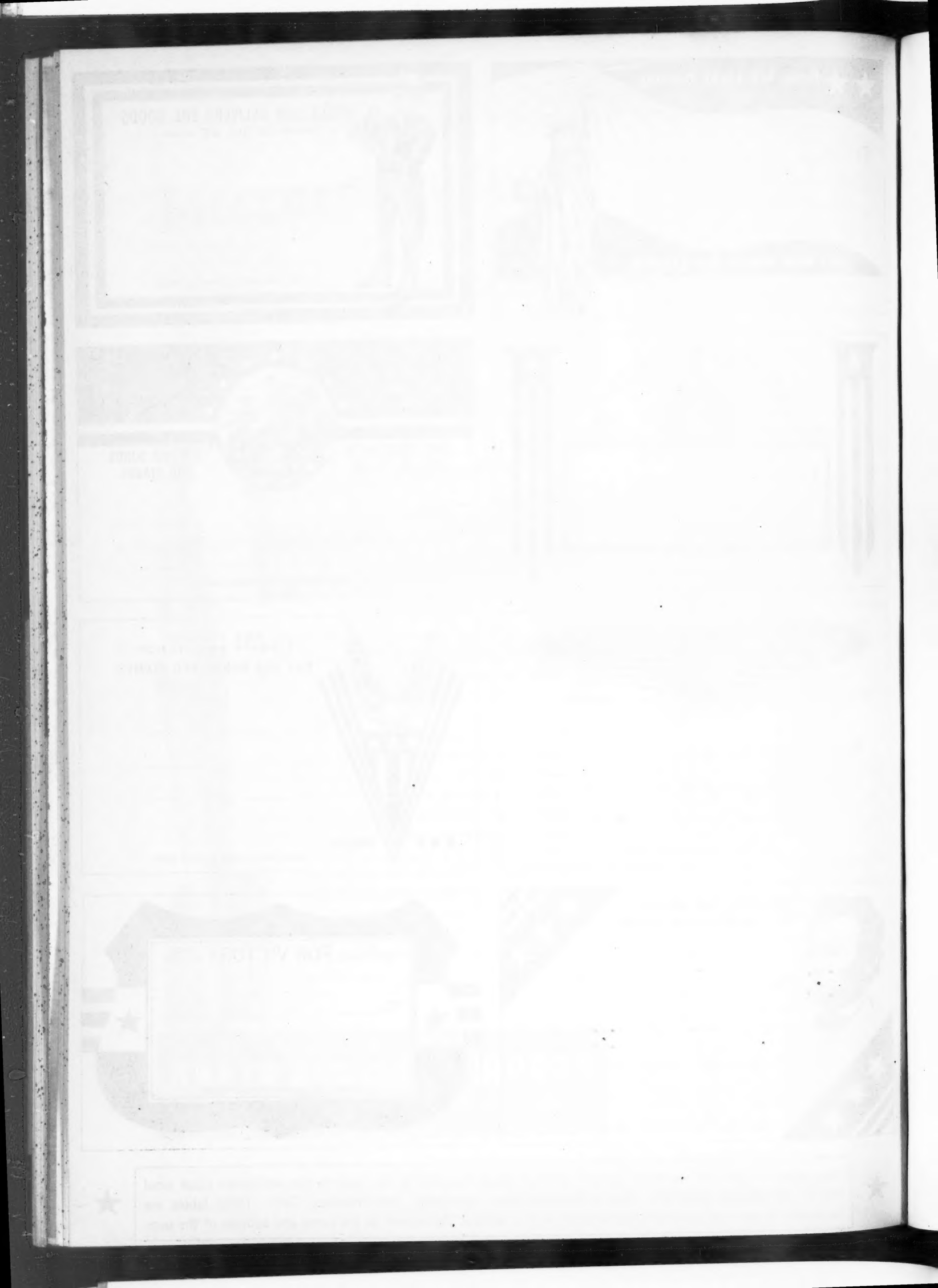
NAME AND ADDRESS PRINTED HERE

BUY WAR BONDS FOR VICTORY AND STAMPS

To _____

NAME AND ADDRESS PRINTED HERE

Very popular is this new series of patriotic package labels designed for the trade by the well known stock label firm of LEHMANN PRINTING AND LITHOGRAPHING COMPANY, San Francisco, Calif. These labels are furnished on gummed paper and are supplied with or without the imprint of the name and address of the



furnished on gummed paper and are supplied with or without the imprint of the name and address of the

HAMMOND

*EASYKASTERS

Still Available

MACHINES IN STOCK
SUBJECT TO PRIOR SALE

* MODEL NO. 1—5 Col. x 18"
* MODEL NO. 2—5 Col. x 24"
* MODEL NO. 3—5 Col. x 24"

OUR JOB

Our job is to produce as many machine tools as possible for our country's war plants. This we are doing with all the facilities and energy at our command.

IT'S SMART TO SAVE MONEY AND TIME THESE DAYS

Do like hundreds of EasyKaster users are doing—actually REDUCE your CASTING TIME as much as 50%. • SAVE at least an hour or two each time you heat up your casting box. • SAVE waiting while remelting additional metal between casts. • SAVE holding the press for those last minute ads. • SAVE hand ladling, walking to box and hand pouring. • SAVE wasted time recasting because of dirt or dross in face of cast. • No "Stop and Go," but continuous casting with 300 lb. valve controlled melting pot. ***MAIL YOUR ORDER TODAY!***

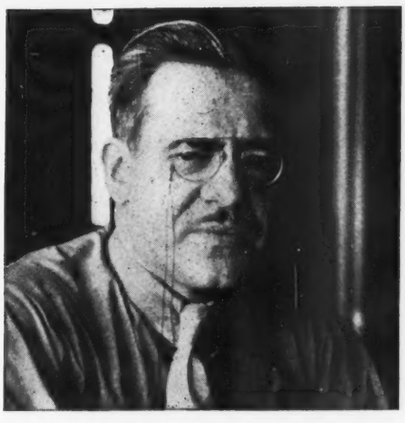
Hammond Machinery Builders INC.
1604 DOUGLAS AVENUE • KALAMAZOO • MICHIGAN
EASTERN BRANCH - 71 WEST 23RD STREET, NEW YORK CITY

Palmer Speaks to Craftsmen

It has been announced that Chief Industrial Consultant E. W. Palmer, of Printing and Publishing Branch of WPB, will address the International Craftsmen's Convention, Grand Rapids, Mich., on Monday, August 10. He also speaks at the clinic on New Materials and Methods Under War Economy.

English Monotype Pocketbook

Published in 48 page and cover, 4 in. by 6¼ in. size, Lanston Monotype Machine Company, Philadelphia, announces that it has available a limited number of copies of *A Pocket Book Containing Twelve of the Most Distinguished Series of Printing Types* cut by The Monotype Corporation, Ltd., London, Eng. The twelve faces are: Albertus, Centaur, Ehrhardt, Emerson, Gill Extra Heavy, Haarlemmer, Matura, Menhart, Perpetua, Romulus, Times and Van Dyck. In the appendix are shown the following foreign language faces: Greek, Hebrew, Arabic, Gaelic, Russian, Polish, Bengali, Davanagari, Tamil and Gujerathi. A number of Prayer Book and Bible faces are shown in small blocks on one page. Specimen settings of each of the faces in the several point sizes are shown. The supply of the booklet, announces the Lanston Monotype Machine Company, is limited and distribution must be made on the basis of "first come first served." Address your request to the company at 24th and Locust, Philadelphia, Pa.



Co-Chairman at Clinic—*Harry A. Porter, Vice President of Harris-Seybold-Potter Co., will be Co-Chairman with President Harvey Glover of the Sweeney Litho Co., Belleville, N. J., at the Offset Platemaking and Printing Clinic, International Association of Printing House Craftsmen convention, to be held in Grand Rapids, Mich., August 9 to 12.*

Copper & Brass Research Bulletin

The June issue is devoted to the part the Maritime Commission is playing in the construction of our merchant marine, the Navy, and the conversion of peace-time plants to the manufacture of war armament. Mechanical executives can gather an idea of the tremendous ship-building program by looking over this issue. Magazine consists of four-color cover and 16 well illustrated pages. Readers of *Printing Equipment Engineer* can obtain copies of the June issue and can be added to the mailing list for future issues by addressing the Copper & Brass Research Association, 420 Lexington Ave., New York, N. Y. at no cost.

New York Office Changed

On Wednesday, June 3 the New York office of the Lanston Monotype Machine Company was moved to 441 Lexington Ave., northeast corner of East 44th St. Richard Beresford is Monotype District Manager.

Will Supervise Civilian Defense

Logan G. Thomson, President, The Champion Paper and Fibre Company, Hamilton, Ohio, announced the Company had agreed to the request of a committee of Hamilton citizens that Alexander Thomson, Jr., Vice President and Advertising Manager of Champion, be granted leave of absence for the duration to act as Executive Vice Chairman of Civilian Defense. He will be an employee of the City of Hamilton as a dollar a year man. He will be responsible for all activities relating to Civilian Defense and volunteer activities related to the Nation's war effort.

Although Mr. Thomson was recommended for a commission as Major, Corps of Engineers, United States Army, he was unable to pass his physical examination. Because of his desire to become active in war work he agreed to take this position.

Frank Gerhart, Assistant Advertising Manager of Champion, will take over Mr. Thomson's duties.

Flies Pennant Again

The Navy Board for Production Awards has granted The Goss Printing Press Company the right to fly the Navy 'E' burgee for six more months, dating from April 24, and a white star will be added to the pennant to indicate renewal of the award.

Under present regulations, privilege to fly the 'E' burgee is granted for a period of six months; after which, performance records are reviewed. If justified, the award is renewed and a white star affixed to the pennant.

Facilities Pooled

As a result of the many demands for industrial finishes and other protective coatings made upon the individual divisions of General Printing Ink Corporation by the war program, it has been decided to pool the facilities of the entire Corporation into one division to be called General Industrial Finishes.

John F. Devine, vice president of the Corporation and general manager of the Fuchs & Lang Manufacturing Company Division, will also act as general manager of the new organization which is called General Industrial Finishes Division. Walter A. McKim, previously director of industrial research for the Pittsburgh Plate Glass Company, will be assistant general manager.

General Industrial Finishes Divisions will formulate and manufacture primers, coatings and finishes for many industrial uses.

Although the immediate objective is to contribute to the war effort and to serve firms working on defense orders, it is announced, the ultimate aim is to offer the general industrial field a line of finishes for post-war requirements.

Dexter Handles Christensen Equipment

It has been announced that equipment manufactured by The Christensen Machine Company of Racine, Wisconsin, for use in the printing industry will be distributed and serviced through the branch sales organization of the Dexter Folder Company.

The machines included are the Christensen Multiple Head Gathering and Stitching Machine; Christensen Press Feeders, both pile and continuous; Christensen Bronzing Machines and Christensen Varnishing Machine.

Manufacture of all of these machines will be continued by the Christensen plant in Racine and under the present Christensen management. Dexter's interest is limited to distribution and service only.

With the Christensen line added to the printing and binding equipment now built in its own plant at Pearl River, it is the aim of Dexter and Christensen to extend and improve its nationwide selling and servicing facilities after the emergency, in order to meet more adequately the new conditions and improved engineering that will confront the printing industry at that time. For the present, orders for machines will, of course, be subject to Government priorities and restrictions. Service and parts for Dexter and Christensen machines will continue to be available, except for whatever limitations may be imposed on critical materials.

ANPA Conference

(Continued from Page 16)

situation, feels that there is sufficient metal available, but that in the near future transportation from smelter to user will be a problem. For that reason he advised carrying enough metal to provide against the transportation problem. He thinks that if metals are kept within the industry the industry will get along without great inconvenience. A surprising amount of old metals in the form of type and plates gets out into the open market and also through persons who go into printing plants to buy. Responding to a direct question, Mr. Nibecker stated that silver can be satisfactory as an alloy in place of tin. Its use, however, involves other metals which are just as critical as tin. Silver, lead and antimony alone do not form a practical combination.

Richard Fitzgerald, Production Manager of the Worcester (Mass.) *Telegram* and *Gazette*, reported the use of stereotype metal base over and over again for mounting cuts. The turnover of base was reduced about six months ago.

"FLECTO"

Gummed Backing Felts

POROUS — to permit the quick and easy escape of steam, coated with glue that will not slip or leave the matrix under heat. Its adhesive will not crack, peel or crystallize under any climatic conditions. Made in gauges .021, .025, .030 and .035, in sheets 18" x 24". And in gauges .040, .045, .050 and .060 in sheets 18" x 22" — cut in strips without extra charge. Free samples on request.

"TRU MOLD"

Cork Molding Blankets

Better Molding with "Matched" Sets

A "matched" set is matched in weight and density. Uniform density throughout these blankets gives "Tru-Molding" over the entire surface of the form. "Matched" sets of blankets make it unnecessary to readjust molding pressure for individual blankets.

Order 2 or 100 — they will be matched in all their qualities. Each blanket has been scientifically tested and graded. We can furnish HARD & EXTRA HARD (Special) blankets that are matched in weight and density.

EASTERN NEWSPAPER SUPPLY

9603 Northern Boulevard **Corona, New York**

You can depend upon the plasticity of Burgess Chrome Mats to pick up and hold the finest detail in half-tones--and that's something any customer will appreciate.
239
A Laboratory Product
BURGESS
Chrome
MATS
BURGESS CELLULOSE COMPANY
Manufacturers and Distributors of Burgess Chrome and Tone-Tex Mats
FREEPORT ILLINOIS
Pacific Coast Representative
RALPH LEBER CO.,
426 Polson Bldg.,
SEATTLE, WASH.

Production Manager John Park of the Chicago *Tribune* discussed the use of plastic plates as substitutes for metal plates. He pointed out that since the manufacturers of this material had been busy with other industries apparently they have not had time to consider the newspaper field.

Harry Wrasse of the Milwaukee *Journal* said there wasn't much if anything new to report upon direct pressure stereotype molding. In answer to a question by George Fuller, however, he did say that more shrinkage was obtained from direct pressure mats than from those molded by roller. Mr. Wrasse reported that 150 quarter-inch molding blankets (used by the *Journal* in direct pressure molding) had been sent to a local (Milwaukee) concern which ground them down to 3/16 in. thickness. These are being used successfully. The 3/16 in. reground corks can be used in multiple, no matter what the thickness of individual blankets. Cost of reconditioning was 50c each. The *Journal* stereotype department molds from 30 to 175 forms per day.

Stereotype Superintendent Charles Kirk of the Detroit *News*, described a guillotine mat cutter developed in the *News* plant. Since the cutter is operated by foot pedal, it is possible for the stereotyper to use both hands on the mat to insure true and square trim. The mat is gauged on the first cut by a piano wire extending across the cutting table, by placing it so that the wire extends over the space between the cut-off rule and body type. Where the scribe mark indentations from the chase are true, these may be used for gauging.

Chairman Burns reported briefly upon the iron plating of comic and magazine color plates in the *Herald-Tribune* plant. He mentioned specifically the bulletin prepared by Vernon A. Lamb and William Blum, Chemists of the National Bureau of Standards, Washington, D. C. He said the iron sulfate solution was applied under a cold system. In July all of the comics will be printed from iron plated stereotype plates.

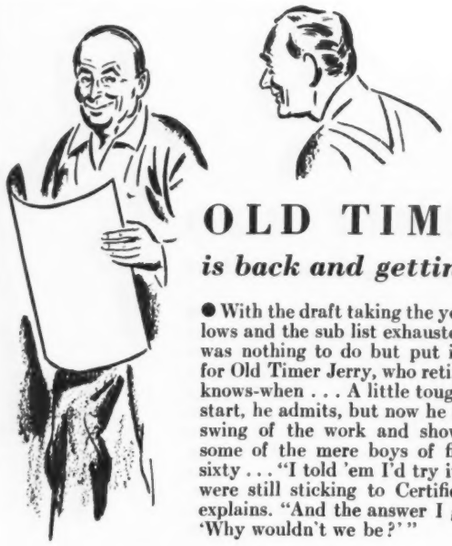
Column Rule for Spacing Material

ONE of the conservation ideas reported recently is that employed by C. Frank Mann, Composing Room Superintendent of the Louisville (Ky.) *Courier-Journal* and *Times*. When the breakup man dismantles pages after editions, he places the full-length column rules in a double-column galley. After the galleys have been filled they are taken to the stereotype department, and are run through the Ostrander-Seymour rotary shaver to reduce the rules to slug height. The galleys are returned to the composing room where the slugs are cut up into labor-saving lengths and are used for spacing material.

Pressroom Meeting

JOHN J. SHEA, General Mechanical Superintendent of the Hearst Newspapers, New York, acted as chairman of the Pressroom Meeting. Chairman Shea announced that the first question submitted was related to whether or not a rubber roller having a piece torn away can be repaired successfully. Vice President Don Crews of Sam'l Bingham's Son Mfg. Co., stated his firm has the equipment to patch rollers, but he stated frankly that it would be a makeshift patch. The heat generated in vulcanizing the patch gives double vulcanizing of the old stock and his firm doesn't recommend doing it. It is better to have the old surface stripped off. When asked by Pressroom Superintendent Walter Ogden of the Cleveland *Press* if these repaired rollers are used as finishing rollers, Mr. Crews said "No." Ed Niles of the B. F. Goodrich Co., cited an exception in the repair of rubber rollers by the New York *Journal-American*, in which place patching compounds have been worked out after the expenditure of considerable time. The roller does swell some because of the double vulcanization.

Wm. A. Schoultheis, Chas. W. Noonan and Walter Ogden all discussed ways and means for extending the life of cutting rubbers by getting four cuts from them instead of two. Manager Walter E. Wines described the method in use in the



OLD TIMER

is back and getting by

● With the draft taking the young fellows and the sub list exhausted, there was nothing to do but put in a call for Old Timer Jerry, who retired god-knows-when . . . A little tough at the start, he admits, but now he is in the swing of the work and showing up some of the mere boys of fifty and sixty . . . "I told 'em I'd try it if they were still sticking to Certifieds," he explains. "And the answer I got was, 'Why wouldn't we be?'"

For dependable stereotyping, rely on Certified Mats, made in the U. S. A.

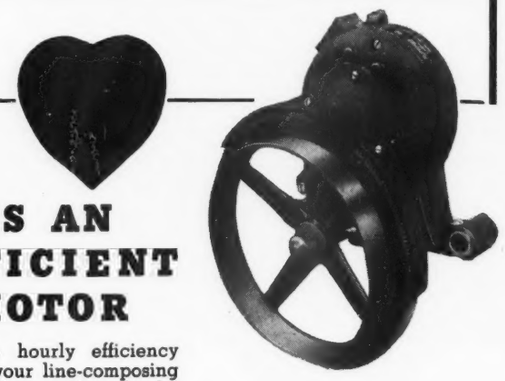
CERTIFIED DRY MAT CORPORATION

9 Rockefeller Plaza, Dept. M, New York, N. Y.

Certified DRY MATS

The **HEART** *of the*

TYPESETTING MACHINE



IS AN EFFICIENT MOTOR

The hourly efficiency of your line-composing machine is largely dependent upon the motor that drives it. The motor, in reality, is the heart of the machine. In these war times, with the shortage of equipment of all sorts, it is highly important that you have dependable Cushman Offset Motors to keep your line-composing machine functioning economically.

If you have a motor that should be replaced, try a Cushman. You will find that the saving in current consumption plus its higher efficiency makes the Cushman Offset Motor the most economical line-composing machine motor that money can buy—and it costs no more than other motors. Write today for prices.

CUSHMAN ELECTRIC COMPANY

69 South Main Street Concord, N. H.

New York *Sun* plant by means of which six cuts are obtained from the rubbers. Walter Ogden described a jig for refinishing the cutting surface of the rubbers. All four sides are used. After the last side is cut, the rubber is placed in a jig and is underlaid so the surface will extend above the frame. A carpenter's plane is then used to cut the rubber down to the right height. When the refinished surface goes down the rubber is underlaid again until it is impractical to repeat the operation.

Rotating and Regenerating Press Blankets

A question submitted by Former Production Manager D. H. Parker of the Montreal (Can.) *Star*, but who now is serving in the Royal Navy, precipitated considerable discussion. Mr. Parker wanted to know whether rotating the use of press blankets would provide a means for the blankets to "recover" during the rest period. George C. Stevens of the Scranton (Pa.) *Times*, spoke of the scheme utilized by Pressroom Superintendent K. G. (Doc) Laycock of the Wilkes-Barre (Pa.) Publishing Co. for rotating press blankets. Mr. Stevens asserted that as the result of the rest periods some of Mr. Laycock's blankets have been in use for 10 years. Director Fred Hudson of the Newspaper Engineering Department, International Printing Pressmen's Union, arose to confirm the information that Mr. Laycock has underlaid blankets to extend their life; The underlay is placed next to the iron (cylinder surface).

Pressroom Superintendent Fred Salzer of the Hartford (Conn.) *Courant*, discussed his method of placing felt blankets in hot water and drying out for one-half hour, after which the blankets were placed on the press and ironed out with solid stereotype plates. Pressroom Superintendent J. W. Addison of the Hartford (Conn.) *Times*, described his method for painting cork blankets with aluminum paint. He advised against the use of varnish base paints because the blanket surface becomes sticky under pressroom temperatures. He asserted blankets last 100% longer because the resiliency is sealed within the blanket by the paint. Pressroom executives were not in entire agreement as to the value of attempting to extend the life of blankets by rotating them. Wm. A. Schoultheis of the Cincinnati *Post*, feels that it is best not to take them off once they have been put on the press, because of column rule indentations and the rather narrow margins in the *Post*.

Graciousness Itself

After listening to the remarks of several pressroom executives, Chairman Shea called upon Wm. F. Grenier of the New England Newspaper Supply Co., and said "The boys would like to hear from one of the most gracious mannered men in the group upon the subject of blankets in general." Mr. Grenier responded, saying there were many gracious people in the gathering, and in particular he wished to state "Chairman Shea is gracious — in public — but in private his manner is different."

Mr. Grenier spoke of a set of oil-proof face blankets in a newspaper pressroom which had sustained 68,000,000 impressions. With respect to felt blankets, a filler is put in by the manufacturer to prevent absorption of moisture.

However, after a felt blanket has become impacted it is possible to renew it by wetting it to swell the fibres, afterwards rolling it down on the press. The blanket then will be called a repressed blanket. One cannot regenerate a cork blanket because of the linseed oil binder. There is nothing that can be done with a rubber blanket to renew it.

Wm. C. Brown of the Minneapolis *Star-Journal* and *Tribune*, uses high-speed presses, balloon formers and non-felt blankets. He stated that non-felt blankets on high-speed presses will not come back. He uses 156 points of packing on his presses.

Fred Hudson, upon being asked what could be done to help better newspaper printing enumerated several items, chief among which are: (1) Hold stereotype plates to 0.003 in. variation in printing surface level; (2) Change blankets when they get down to pitch line; blankets can be underlaid to obtain good sheet travel; (3) Maintain careful checking of impression to add to the life of the blanket. He feels that not over 0.004 in. to 0.005 in. variation from end to end will be a close tolerance.

MODEL "F" FLAT SCORCHER

Direct Heat
Thermostatic Control

$120 f. o. b. Lynn, Mass.

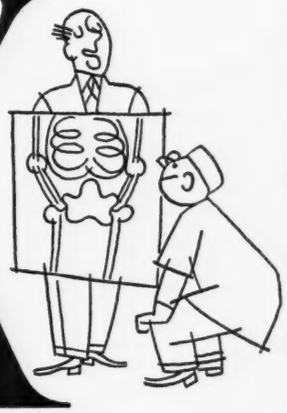
MODEL "E" CURVED SCORCHER

Direct Heat
Thermostatic Control

A.C. $150 D.C. $175
f. o. b. Lynn, Mass.

AMERICAN PUBLISHERS SUPPLY
17 Stewart Street, LYNN, MASS.

X



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Through KIMBLES they go
To show up the innards
Their excellence you'll know.

Motors by KIMBLE
Distributed by AMERICAN TYPE FOUNDERS
Branches and Sales Agents in 25 Cities

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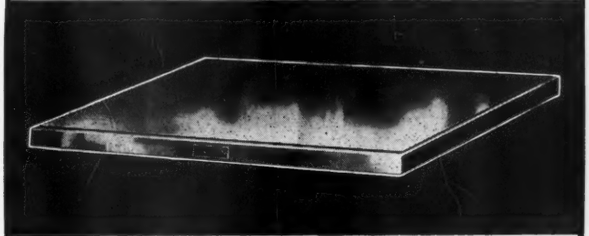
LEVEL • ACCURATE



CHALLENGE Semi-Steel
IMPOSING SURFACES

Dependable as the bed of your cylinder press, these superior surfaces are cost-reducing equipment. Built to last—two inches thick—strongly reinforced—will not sag or "give." No coffin required; permits a larger working area. Rabbet around the edge is right depth for standard galleys. Investigate now. A size for every need. Write for prices today!

Challenge

THE CHALLENGE MACHINERY CO.

Main Office and Factory:
GRAND HAVEN, MICH.

Eastern Sales Office:
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Saves Metal and Valuable Man Hours

MONO-TABULAR BROACH

Revolutionizes Ruled Forms for **VICTORY!**

FAST—SIMPLE—ECONOMICAL

Write for Particulars

Universal Mono-Tabular Corporation
418 N. ST. PAUL ST. **DALLAS, TEXAS**

Get **MAXIMUM OUTPUT** with the C&G No. 3-A SAW TRIMMER

● Send for FREE booklet that describes the C&G Any-Angle Gauge, Right and Left Hand Miter Vise, Positive Work Holder, the C&G Universal Saw Blade and Grinding Attachment, and many other exclusive C&G features that contribute to easier, safer, and faster operation.

You should have the full facts NOW. Your request for booklet does not obligate you in any way.

C&G No. 3-A SAW TRIMMER

MILWAUKEE SAW TRIMMER CORP.
610 EAST CLYBOURN STREET, MILWAUKEE, WISCONSIN

Checkup on Underlays

As a check-up upon discussions of previous years, Chairman Shea introduced the subject of plate underlay. A number of executives spoke for and against the practice. Chairman Shea observed that any differences of opinion probably were due to type of press, speed at which it is operated and the engineering that went into the construction of the press. The remarks of Auburn Taylor and Walter Ogden against plate underlay seemed to meet the approval of a majority of those present. In summing up the discussion, Chairman Shea stated: "The only conclusion we can draw from this discussion is that you fellows don't but you do underlay plates. The consensus is that we shouldn't do it."

When asked specifically by Chairman Shea, Production Manager John W. Harm of the Chicago *Daily News* stated it is not the practice to underlay plates in the *News* plant because of the use of 75 line halftone screen and the danger of filling in the screen on the press.

Pressroom Superintendent Earl Weiskittel of the Youngstown (O.) *Vindicator* stated pressmen are afraid to pack presses close to the pitch line. Stereotype plates now are being furnished to him with 0.002 in. to 0.003 in. variation and he is packing his presses from 0.166 in. to 0.172 in. With the consistent improvement in stereotype plates he hopes some day to get down to 0.156 in. packing. Some of his blankets have been in operation two years. A number of these have about 32,000,000 impressions on them. He said the blankets show no more wear at the head and tail than they do in the middle.

Setting Impression

Regarding the setting of impression, C. W. Noonan, George Morrison of the Cleveland *News*, Wm. C. Schultheis, Eugene Doyle of the Toledo *Blade* and several other pressroom executives feel that this work should be performed by one person for the reason that no two men set impression alike. The idea is to get uniform results throughout the paper.

Edward Mahar of the Chicago *Tribune* wanted to know how one or two men in a plant operating around 100 units could be expected to set impression, especially when changing from wide to narrow rolls. In his plant the man in charge of the unit sets the impression. The consensus of opinion seemed to be that the setting of impression should be delegated to certain men depending upon the number of units in use, but that this task should not be too generally distributed among the force.

Some complaint was made by pressroom executives that newsprint had changed to a yellow appearance within recent months. Earl V. Knapp of Crown Zellerbach Corporation asserted there had been no change in paper "color" so far as his company is concerned, and he feels the same condition prevails among other paper companies. The restriction by government of the use of chlorine for bleaching by 30%-35% has not affected the color of newsprint. Other causes, such as dirt in water, can bring down the brightness of paper. Mr. Knapp admitted an increase in newsprint roll damage because of government's insistence that automobile or any other kind of freight cars now be loaded to capacity. "It's no trick to load a car fully," he said, "but try and get the rolls out without damaging them."

E. P. Lacure of the Duplex Printing Press Co. advised that in case it is necessary to order a machine part by telegram, to be sure to follow it up by mail with a regularly made out purchase order containing the A10-P100 Rating. The Rating cannot be sent by telegram and if it were to be sent it would be unacceptable.

Ink Manufacturers' Problems

Dr. Wm. F. Talbot of General Printing Ink Corporation discussed the ink manufacturers' problems during he war. Transportation is the current problem. It may seem strange that a material can be critical one week and free the next. Respecting chrome ores, ships return from the four corners of the world with a load rather than return with water ballast. If ships return safely the supply of the products brought in by them eases the market, otherwise the situation remains critical. Ink manufacturers' laboratories now are engaged 65% on military work and 15% on shortages. Guy H. Burns of Geo. H. Morrill Co. corroborated Dr. Talbot's remarks.

Photo-engraving Session

WEDNESDAY morning's Photo-engraving meeting was presided over by Photo-engraving Superintendent Maurice A. Hagan of the Philadelphia *Inquirer*. A checkup occurred to determine if anyone had found a definite preventive or remedy for scumming of prints in hot weather. Photo-engraving Foreman R. J. Walker of the Atlanta (Ga.) *Constitution*, asserted no one had yet found the real answer to this difficulty. This trouble didn't occur before the introduction of film. He advised, however, that the temperature of the plate should be kept even; the whirler should be watched; try not to place a cold glass against a hot plate; pour the developer from a milk bottle, the developer having been taken right out of the stock room.

Chairman Hagan suggested the use of celluloid between the negative and the plate to prevent transfer of the dampness. He thinks this is a moisture proposition which occurs only in warm weather. In the winter time no one takes the time or trouble to try to figure out the cause of scum.

Lewis S. Somers of Imperial Type Metal Co., and several others, discussed the metals situation. Mr. Somers stated zinc plate stock is yet obtainable from producers without the A10-P100 Preference Rating on purchase orders. However, if purchase orders carry the Rating, it will help the manufacturers. Just at present there is no ruling related to the purchase of zinc. He qualified his answer by stating he didn't know what rules might be required by WPB next month.

D. C. Donaldson of Eastman Kodak Co., in speaking of a shortage of chemicals for photo-engravers, stated he can't see the possibility of a condition where customers will be let down. If there is a shortage of certain chemicals he feels substitutes will be found for them.

W. W. Warfel of Chemco Photoproducts Co., when asked about shellac and alcohol availability, stated: "The situation doesn't look so good. With respect to alcohol it looks as though photo-engravers will get enough to put on plates and less in their stomachs." One

(*Continued on Page 40*)

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Test Synthetic Gasoline

The Friday, May 29 issue of the Mount Vernon (N.Y.) *Daily Argus* reports the successful testing of a synthetic motor fuel for automobiles. Inventors of the new fuel are two engineers, John B. Webendorfer, well known in the printing equipment manufacturing trade, of Mt. Vernon, and William Yonkers of Yonkers, N. Y.

During the test run about 20 miles was covered in a run through Mt. Vernon and Yonkers in an eight-cylinder car. Mr. Webendorfer stated the materials needed to make the fuel are easily accessible and plentiful.

The only change necessary to adapt pleasure cars for use of the synthetic fuel involves installation of a specially designed carburetor. Mr. Webendorfer also stated that further experimentation is necessary before the fuel can be made for commercial use, because the test run showed the top speed available with an eight-cylinder car is 30 miles per hour, but he believes the speed difficulty can be overcome by revising the carburetor.

other comment was that cold top trouble, in some instances, is caused by grease in a re-used drum in which the grease residue had not been cleaned thoroughly from the drum before filling it again.

Manager Walter E. Wines of the ANPA Mechanical Department, discussed Government's limitation to 35% of the amount of shellac used in the corresponding period of last year. It has been suggested that Manila resin could be substituted for the shellac. Under a WPB order, engravers are permitted to buy up to 50% of last year's consumption. However, it seems that newspaper engravers have not used Manila resin and therefore, technically would not be eligible to buy any. It appeared that no one present in the meeting had used Manila resin.

Nitric acid conservation was urged by several speakers. W. W. Warfel pointed out that by watching the acid bath carefully the maximum number of plates could be secured from it. Plates should be assembled closer together. Keep the acid bath cool. If it is permitted to get hot it will oxidize. A handful of alum in the bath will enable the etcher to get one more plate, but does not extend its life any further.

Mr. Somers, in response to a question, said that alum did improve the etching qualities of the bath. Conservation can be helped a lot by painting out open areas in flats more carefully. With respect to the use of citric acid for extending the life of the bath, he said the chemical is almost unobtainable. Jack Kelt of the Mallinckrodt Chemical Works, discussed the acid bath cooling facilities in the engraving plant of the St. Louis *Post-Dispatch*, adding that "this is a simple matter if one has the cooling facilities." Photo-engraving superintendent D. D. Curriden, Minneapolis (Minn.) *Star-Journal*, also discussed nitric acid conservation where two etching machines are available in a plant.

The use of the back side of zinc plates for halftone engraving came to the front. In an ANPA Mechanical Bulletin (issued March 20), the etching of halftones on both sides of zinc by the Westchester County (New York) Newspapers, was discussed. Apparently, the results obtained are satisfactory. Manager Wines stated a central engraving plant makes the cuts and uses large flats for this work. A page of halftone pictures are made up and the molded page mats are sent to member papers. Each paper flat-casts the mat and afterwards cuts up the individual picture casts, the captions are set into type and the stereotypes and caption type are made up into page form.

When the reverse side of zinc plates is to be used, it is necessary to remove the acid resist coating and use considerable energy in polishing the surface to eliminate any grainy condition.

In answering a query, Mechanical Superintendent Louis Woelfel of the Buffalo (N.Y.) *Evening News*, stated the *News's* engraving department had experimented with reverse-side halftone etching but had discontinued further attempts because it was found the halftones were low in the highlights. He added: "If there is a shortage of zinc we will use both sides—otherwise we will not."

General Mechanical Superintendent John J. Shea of the Hearst Newspapers, explained that after a survey among 17 or 18 Hearst papers, he had come to the conclusion that attempting to use both sides of zinc slows production unless the work could be done entirely on large flats. Any amount of money saved in materials is more than offset by increased labor costs because of production slowness. In a two weeks' test in his organization, in which every possible plate was utilized, the amount of metal saved was only 12%—even with the cooperation of the editors.

Harold Burns of Edes Manufacturing Co., explained that "After all, one can make a cut from roofing zinc—but it will cost money. If zinc plate stock becomes critical enough, cuts *can* be made from this material if it has to be done." The results, however, will not be satisfactory.

Mr. Shea introduced the subject of substitutes for copper for color work. Chairman Hagan invited Harold Burns to discuss Triplemetal. Mr. Burns stated this metal would "take" finer screens than ordinary zinc. He knows of one plate-making house making color process plates from cold top enamel. If hot top is used on Triplemetal some of the advantages are lost. During the processing the metal loses some of its hardness and there is a small amount of stretch. Mr. Warfel reported the successful multiple molding of color plates by two firms. The shrinkage (approx. 1/16 in. after 56 molds) in the color plates is uniform because of the use of steam tables for drying the mats. Each set of mats was kept together to keep the shrinkage uniform.

Lewis Somers reported that Register Redibak also can be used as a copper substitute. Between 70% and 80% of the stretch has been removed.

The Color, Roto and Advertising Forum Report will appear in the August issue.

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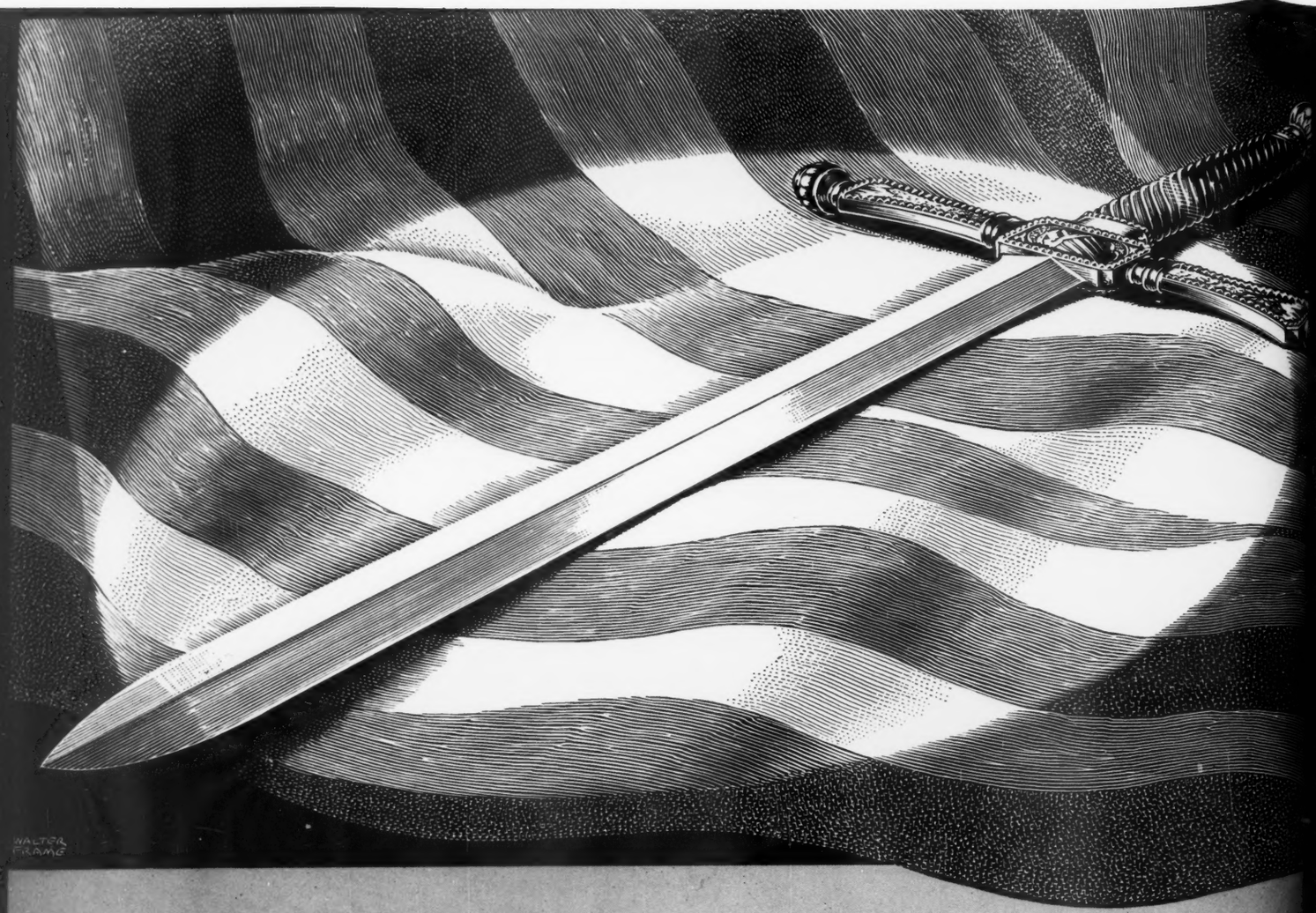

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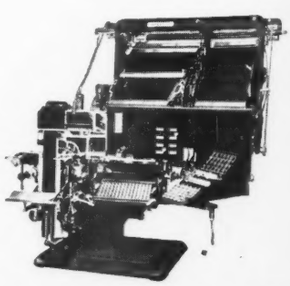

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